Understanding Perceptions of Sentience from Human- and Animal-Being Interactions

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Abstract
This work sought to uncover the ways in which profound interactions with non-human species affect perception of various sentient life such as companion animals/pets, liminal animals/pests, and animals that are often dubbed “wild.” Through an online community, there existed a creation of space where others can be educated about animal being sentience, encouraged to understand that other species are capable of emotional reasoning, and challenged to not only prevent the suffering of other species, but to proactively support a system where humans and wildlife can not only coexist but thrive. Through the use of a platform on which people can share images and text regarding their meaningful interactions with sentient wildlife, desires to educate members of the BC community about animal sentience and encourage them to pursue and deepen their connections through more of these interactions have been instilled. Through a unique combination of qualitative and quantitative data, key findings such as proximity and location, as rooted in principles of coexistence, help to illustrate perceptions of animal sentience in manners that affect each grouping--of our socially-constructed classification groups deployed including: companion animals/pets, liminal animals/pests, and animals often dubbed "wild"--differently.

Keywords
sentience; coexistence; proximity; multi-species; interactions

Introduction

Before delving into the contents of the literature review, one that is often cold with mere recitation of scientific fact and discovery, we seek to first create a substantive area of warmth and compassion. Such is being done to evoke the mood surrounding

decreased with increasing severity of damage." (Hosaka and colleagues, 2019, pp. 151). This highlights the importance of exposure to nature among residents at an early age, as it fostered a more inclusive setting for older residents to remain connected to local wildlife, even when animal beings were creating issues.

Likewise, those who lived in more urbanized areas growing up tended to be more disconnected from nature and animal beings when they were older, which tended to cause more negative perceptions of wildlife (Thornton & Quinn, 2009). Thornton and Quinn (2009) found that older Calgary residents were much more accepting of cougars than those who were from an urban area (pp. 290). As a result, those from an urban background were less familiar with wildlife and therefore had a "heightened fear of cougars" (Thornton & Quinn, 2009; pp. 290). Thus, more interactions with non-human animal beings dubbed "predatory" or "wild" can foster a more positive perception of cougars, and lead to a decreased sense of fear. Misconceptions, in addition to physical and emotional distance, separate individuals from acknowledging the sentience of non-human beings.

Social influence was another strong factor in shaping human perception of animal beings and, in this case, livestock in a study conducted by researchers from the University of Michigan, Arizona State University, University of Alabama, and the School for Environment and Sustainability (Baeza and colleagues, 2019). Baeza and colleagues (2019) explain how, when farmers were aware of the risk factors of certain animal beings on their livestock and communicated with farmers around them, they were more likely to "behave the same way" (Baeza and colleagues, 2019, pp. 908). If certain wildlife was not accepted by some farmers, this increased the chance that other farmers would exclude this animal from their property (Baeza and colleagues, 2019, pp. 903). This points to the prominent ties between farmers who have

grown up doing this work, which emphasizes how influential childhood experience with sentient animal beings is on adult perception now (Baeza and colleagues, 2019). This way of knowing between farmers and their animal beings is similar to our research because it highlights the dynamic relationship of sentient interaction. This relationship is always changing and adapting. Many farmers become much closer to each other as a result of their close relationship with s

and lived closer to the city (Thornton & Quinn, 2009). Again, profound interactions are shown to decrease the sense of fear and add to the emotional connection to animal beings previously conceived as predatory. Similarly, a study looking at Cape Cod residents' perception of coyotes found that over time, residents' acceptance of coyotes increased while their fear levels decreased (Jackman & Rutberg, 2015). In Reno-Sparks, NV, residents' positive perception of hawks correlated with the number of encounters. In addition, their positive experiences with hawks also brought benefits of happiness, curiosity, and enthusiasm to the residents (White and colleagues, 2018). Predatory animal beings may inspire fear in humans, but with time, increased awareness, and more interactions with these wildlife, residents may come to accept and benefit from coexistence.

Oftentimes, experiences with species deemed similar to humans fosters a deeper emotional connection. For example, a series of interviews on dolphin interactions revealed that a feeling of reciprocity and sustained eye contact greatly influenced the feeling of connectedness (Yerbury & Boyd, 2018). Moreover, the cultural significance of dolphins and other non-human animal beings as spiritual beings often shapes our interactions with them (Bulbeck, 2005 as cited in Yerbury & Boyd, 2018). Dolphins and other cetaceans form complex social groups. This feature resembles the structure of human societies, which makes this group of species easier for people to empathize with (Gardella, 2020). Lastly, zoos are a common environment for researchers to survey the public's attitude toward a variety of species. One survey conducted at the Melbourne Zoo revealed that out of the 320 species at the zoo, the respondents most commonly had a meaningful interaction with the following nine categories of animal beings: bird, butterfly, great ape, large carnivore, large herbivore, primate, reptile, small carnivore, and small herbivore (Howell and colleagues, 2019). The respondents with the highest reported

emotional connection during their animal encounter were most often with great apes or primates. Research from zoos highlights the notion that the degree of emotional connection to an animal is a function of the species' human-like characteristics

considered sentient in Buddhist teachings by virtue of their capacity to experience suffering, or ***duhkha***

interact with wildlife themselves and gaining more detailed insight into their own emotional experience. This helpfully contributes to our own research methods and gives us a glimpse in the best way to collect information on profound wildlife interactions.

Public Impression, Culture, and Wildlife Management

Human emotion not only impacts an individual's perception of sentience, it also influences an individual's perception of wildlife management. Literature has revealed insights that illustrate the necessity of taking into account public perception and culture when it comes to establishing wildlife management. Thornton & Quinn's findings indicate that public perception of cougars proved rather favorable as the majority of respondents indicated a desire to protect and maintain the region's cougar population (2009). This positive public perception of cougars came after increased interactions with cougars decreased residents' fear (Thornton & Quinn, 2009). Such showcases the inherent power that coexistence has, as when these residents actually began to coexist and bear witness to the beauty of the large cat in nature, human perception actually showed high favorability rates for cougars by people in adjacent communities. Not only does human emotion influence perceptions of sentience, it also affects perceptions of necessary protection. There was also a desire by these residents to be more involved in the realm of wildlife management, admitting a lack of knowledge in this regard.

In an article discussing coexistence of animal beings and human beings, particular attention is oriented on differences that affect wildlife perception (Konig and colleagues, 2020). There are differences in perceptions on wildlife management due in large part to the type of setting one grew up/ lives in: urban, rural, suburban. For example, findings suggest that those in urban settings tend to support coexistence policies as they are more isolated from the realities of

Gaps in the Existing Literature and Future Directions

The existing literature reveals a variety of emotional responses humans experience after and during interactions with wildlife (Hicks & Stewart, 2018; Farber & Hall, 2007; Yerbury & Boyd, 2018; Soga & Gaston, 2016; Howell, McLeod, & Coleman, 2019; Finnigan, 2017; McIntosha & Wright, 2017). Studies demonstrate the potential for humans to experience a deep connection with non-human animal beings, to the point where a feeling of reciprocity shows the occurrence of wildlife emotion (Thornton & Quinn, 2009). However, research in this field does not address how these interactions influence the individual's perception and definition of non-human sentience.

While many studies use online surveys or questionnaires for data collection, few if any use social media platforms to elicit written responses about non-human interactions. Given that in person interviews are not permissible in the COVID-19 context, we aim to fill this methodological gap by using a Facebook group to collect Facebook posts that highlight personal experiences from our community. Online platforms, especially in the context of a global pandemic, have the potential to serve as educational tools. We fostered an online community where people can share their viewpoints and experiences with wildlife, educate themselves on animal sentience, and encourage each other to seek out meaningful interactions with wildlife. We also interweaved our own vulnerability as researchers into the experience of our participants, doing so in the image of Randol Contreras' 2019 recommendations about modern ethnographic practices. Contreras points out an important gap that we hope to bridge in our research in that traditional ethnographers are often aloof and removed from their work, gatekeeping the inner workings and challenges of their research and making the process inaccessible and opaque. By increasing our own vulnerability as researchers and participants, we hoped to mend this "broken

ethnography" as described by Contreras and connect to our research in a more meaningful and effective way.

Most of the literature focuses on either a single species or an overly generalized definition of wildlife, so our research will bridge that gap by looking at the subsections of liminal animals/pests, companion animals/pets, and animals often dubbed "wild."

Research Purpose

It is in light of the aforementioned research and the gaps observed that this research has oriented itself on profound interactions with wildlife and how that affects the perception of various types of sentient life and the definition of sentience itself. Particular attention has been placed on three predetermined subsets of sentient life including companion animals/pets, which

The three images below demonstrate example posts that include photos of non-human sentient being interactions in addition to a written response describing the emotions felt during the

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platform on which people can share images and text regarding their meaningful interactions with sentient wildlife, we aimed to educate members of the BC community about animal sentience and encouraged them to pursue and deepen their connections through more of these interactions.

Methods

Participants and Instrumentation

We created a Facebook group that allowed for posts including text, audio, and images from group members and invited members to said group with Boston College students from the official Boston College graduation year groups (Official Boston College Class of 2021, 2022, 2023, and 2024). We pooled together 60 Boston College undergraduates, 30 males and 30 females. Boston College students particularly served

We conducted a pre- and post-survey to gauge changing attitudinal ways of knowing on animal sentience and biodiversity from the start to the end of the data collection period. This also served as a way to provide a deeper qualitative understanding of individuals' standing on this topic. Both the pre- and post- surveys asked the exact same questions to see if there were any changes observed. We were also active in posting about our own experiences in order to encourage more participation. We hoped to lead by example and show how reflection can be beneficial in creating a story around sentient interactions. In addition, we hoped that our stories about our most memorable sentient interactions would showcase just how transformative these experiences can really be on our perception of sentience. These stories, in addition to the more mundane experiences, would help inform both us and our participants as to the factors that influence the quality of our sentient interactions.

Informed Consent Procedures and Confidentiality

Consent and confidentiality was acquired and maintained through the use of a pre-survey sign on for consent to collect data from individual human participants, and we used Qualtrics to ensure that data remained private. We identified major trends in the pre- and post-survey in order to gauge how perceptions of sentience changed over the course of data collection. The online survey data was stored electronically as Excel files and the Facebook posts as screenshots/transcripts that excluded the name of the participant. The Facebook page was deleted after the data collection and analysis period.

In regards to confidentiality, the following question was posted on each survey, and each respondent must have checked Yes to continue. Refer to Appendix B.

Data Collection

This group will require an intro survey for entry. As the individual requests permission to the private Facebook group, they were sent the link privately to the Qualtrics pre-survey. Only after the pre-survey is completed were the human participants admitted into the Facebook group.The introduction survey seeks to gauge where each individual stands in their interpretations of sentience and perceptions on different subsets of wildlife that we have categorized: wild, liminal, and companion animals. To complement such, we also called for a few or more posts including at least a textual description of some interaction with animal beings, but imagery, video, and/or audio clips encouraged as well. We also took the role of participatory action researchers, meaning we posted our own Facebook posts that demonstrate our own self reflections on the meaning of sentience. We posed questions to the Facebook group, similar to the way Bonish-Brednich posed questions to workshop participants. At the secession of data collection, a post-survey was posted and required for each data point used in our analysis. A post was made at the end of the research period in mid-March with a link to the post-survey (which contains the same questions as the pre-survey). This qualitative data collection included reflection on both personal understanding of animal sentience and personal enga!l enga!p-

posts and surveys were used to make assertions about the potential relationship between perception of animal sentience and degree of concern for biodiversity loss.

We took inspiration from Bönisch-Brednich, who calls on ethnographers to be co-creators alongside their participants. In this sense, we used our human participants' reflections in addition to the exchange of ideas through the comments on the Facebook posts to create a dialogue that flushes out our narrative analysis. Although we utilized the quantitative data from our surveys, we also incorporated the stories that emerge from our communication with participants and the journey that we, as participatory researchers, have undergone over the data collection period. In this way, we are not merely using the Facebook posts as "raw data" but as pieces of the puzzle that fit into a larger narrative analysis. In addition, O.F. Borda demonstrates that both researchers and participants are real "thinking-feeling persons" whose unique perspectives and experiences should both be under consideration (2006). Thus, we incorporated both our participant's Facebook posts and our own posts in our narrative analysis. We believe that including both quantitative measures in addition to ethnographic descriptions will only serve to increase the rigour and validity of our work. For example, one narrative we looked for is whether or not our participants view non-human sentient

Research Intentions

Our area of research focused on profound wildlife interactions and how they contribute to

our focus on the BC community as a way of deconstructing global uniformizations and focusing on the specific culture of the BC community. However, we also hope that this project (especially our use of Facebook groups as a tool to increase community dialogue) serves as a generalizable format that other communities can adopt for future research.

With this research, we hoped that it can be used to bring forth positive social change on behalf of animal beings. We are a part of the generation that will ultimately make the influential choices that affect the protection of non-human life. Being Environmental Studies majors, we are strongly driven by and passionate about a vast array of environmental issues such as the preservation of sentient interaction and it’s grounding abilities in today's vastly changing world. Not only do these interactions help deepen our awareness and help improve our appreciation of the stillness of nature, but it helps us to appreciate animal beings and value them just as equally as we do with other humans.

The future of these sentient interactions, therefore, we hope will create an opportunity for individuals to connect with animal beings where, in the past, perceptions of them have been negative. It is possible more frequent interactions could reshape individuals’ emotions in a way that they will have a more deeply compassionate, prominent, and grounding experience with animals many now consider to be liminal animals/pests. We hope that encouraging our community to pursue these empathic connections with animal beings will foster a mindset that aligns with the one laid out by Wallach and colleagues (2018). Ethical dimensions should rest at the heart of conservation efforts, and in not such a way that only emphasizes ethical orientations that solely favor humans and feed into anthropocentrism as described in Treves (2019). Preserving ecosystems as a collective has historically come at the expense of individual species: for example, the killing of over 1,000 wolves in Canada in an effort to preserve the caribou

population in 2014 (Wallach and colleagues, 2017). We believe that a greater understanding of the sentience of all species will perhaps motivate people to advocate for conservation policies that do not cause harm to individual animal beings, but rather employ creative solutions that are informed by ecological research. Upon recognition of sentience, we hope our work serves as a foundation to understanding the feasibility of recognizing non-human species in the domain of ethics. Of which, systems of multispecies justice can be established and perhaps lead to the creation of systems of adjudication that are in line with such a framework, in line with the discussion set forth by Treves (2019).

Beyond this, our work sought to nurture a shift from the current, anthropocentric paradigm to that of "One Nature," as proposed by Özdemir (2020). Nature is not only meaningful insofar as it serves the needs of humans. Traditional dichotomies that pit "humans" against "wildlife" are detrimental to conservation work because this paradigm does not acknowledge the intrinsic value of non-human species. Recognizing the shared sentience between ourselves and other animal beings will help to deconstruct these binaries and understand that all beings exist under the same, fundamental conditions. Ultimately, we hope our research leads not only to increased academic exploration into the topic of sentience, but also results in tangible emotional development within our human participants and ourselves. We followed Borda's (2006) example by writing our findings in a way that the general public can engage with, so as to not exclude the average person from encountering and understanding the significance of our research. Also, the unique characteristic of the Facebook groups is that human participants are able to receive a greater appreciation for animal sentience before the research is even published merely by reading through other community member's posts. Not only is connecting with sentient life valuable to human emotional well-being, but it encourages a lifelong

relationship with other life, one that has the right to constantly change, evolve, and adapt as perceptions change and grow with the frequency of interactions. These connections would cause a ripple effect in the BC community and in the greater human consciousness to increase empathetic ties to all life, not just for animal beings, but for the wilderness and nature. When individuals feel the connection with another animal in such a profound way by recognizing we are all connected, this will encourage them to appreciate natural landscapes as well.

Results

Upon completion of our data collection period, through the 64 Facebook group posts, which included 21 examples of liminal species, 27 pets, and 16 posts of other wildlife, we received 14 videos and 65 images. As a reminder, we, as researchers, took a proactive role in this collection process, in which traditional participant-researcher dichotomies were disrupted with the intentions of fostering community and creating an area of community on the basis of coexistence and understandings of sentience, as inspired

While the rules of our Facebook group asked human participants to talk about their perception of sentience within the context of their interaction, nearly half of the human participants did not include this. Nevertheless, six main categories were reflected in the definitions given: similarity to humans, proximity to the animal, awareness of other beings, ability to sense emotion, multiple of these answers in one definition, and miscellaneous definitions. We formulated these categories based off of the common answers from the human participants themselves in the surveys and Facebook posts as opposed to from existing literature, however our categorization is heavily influenced by prior research mentioned in the paragraphs above.

developed and intelligent, and they've been shown to communicate with their own languages. They're known to play games and have high problem solving abilities". Some definitions included characteristics such as loyalty, curiosity, and high levels of intelligence while others described human-like behaviors including having a language or organizing in social groups. Other definitions defined animal sentience as the level to which animal beings share similarities with humans, implying that there is a hierarchy of sentience between animal beings that are most

Facebook posts, “no definition” meant they did not mention sentience at all. However, 10 people in the pre-survey definitions explicitly expressed doubt or confusion at the definition of sentience, but then ultimately offered a definition. In contrast, no participant in the post survey expressed doubt or hesitancy in their definition. This change from pre to post survey reflects the growing confidence of human participants in their understanding of animal sentience.

Changes in Tone - Before and After Community Participation

Another theme we analyzed in the data was the tone of human participants’ responses to the pre- and post-surveys as well as the Facebook posts. Tone includes the types of words used when describing pets, wild animals and liminal species. Positive, negative, and neutral tones in human participants’ written speech can be identified throughout the course of data collection. Positive tone is identified by the presence of diction that implies warm affect toward animals; this would include words that convey joyful, connected, appreciative emotions toward the species in question. Negative tone is the opposite: words that convey feelings of disgust, disconnection, a desire to put distance between the participant and the animal. Neutral tone consists of descriptions of the interaction that do not provide any information about the pemion

	Pre-survey			Post-survey		
	Positive	**Negative**	**Neutral**	**Positive**	**Negative**	**Neutral**

Level of Emotion Attached to Animal Beings

A notable and unforeseen result of our research is the role of hierarchy in human participants' perceptions of animal beings as, for many human participants, it was stated that many animal beings were not seen as sentient due to their limited ability to think cognitively and

explaining that they experienced a traumatic interaction with an animal as a child and now finds it difficult to connect with them on a deeper level. Another participant discusses the profound impact their pet/companion animal had on them that they even wanted to pursue future interactions once leaving college: “I love animals and love the peace that spending time with them can bring to me. My family has a 12-year-old dog, and he has been the light of my life for ten years. I'm hoping that once I graduate, I can spend some of my time volunteering at an animal shelter when I'm not working.” This highlights the interconnectedness of hierarchies and emotion towards animals, as this participant expresses

Figures 2 & 3: Participant responses to the statement "I believe animals are sentient beings" in each survey

As seen in the above figures, we observed a notable shift towards stronger agreement with the statement "I believe animals are sentient beings." This indicates that the animal interaction-focused Facebook group heightened participant awareness to the sentience of other nonhuman animal beings, influencing the group to trend more toward sentient belief. Although the trend shift for this survey question is not as strong as some of the other observed questions, it is worth noting that the group became overall more strongly opinionated in their belief in nonhuman animal sentience.

Figures 4&5: Participant responses to the statement "I value a pet's life more than other forms of animal sentient life" in each survey

The above figures show the very strong shift in participant responses to the second multiple choice survey question about agreement with the statement "I value a pet's life more than other forms of animal sentient life." The two

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jumps in the group toward disagreement. This indicates that human participants who originally valued pets over other species types, like liminal

shifts in responses send the message that the group overall moved to embrace a multi-species definition of nonhuman animal sentience after participation in the Facebook community.

Figures 8&9: Participant responses to the statement "I believe humans to be the only sentient beings" in each survey

The charts above show responses to the final question in each of our surveys asking about the statement "I believe humans to be the only sentient beings." Although our human participants started off with general disagreement with the statement, their disagreement became stronger after being part of the Facebook community. There was a significant decrease in neutral responses as well. One outlying point shows an uptick in agreement with the statement,

perceived level of sentience. For example, upon attaching a video showcasing an interaction of

animal sentience as it pertains to the multi-species framework of pests or liminal animals, pets or companion animals, and otherwise “wild” animals. Evidence from the Facebook group posts gave us insight into a wide variety of different types of multi-species interaction. The two surveys gave us further qualitative and quantitative avenues through which to analyze the dynamic changes of the group over time.

Within the Facebook posts themselves, parsing out significant attitude shifts proved challenging as the group engagement varied over time. However, it was very evident through the interactions online and the variety of the posts that sentience understanding grew and developed among human participants and definitions became more inclusive across species. The pre- and post-surveys further compounded these findings, with a qualitative analysis of the short answers showing significant increases in positive attitudinal ways of knowing toward liminal species and a heightened mention of other wildlife. The multiple-choice questions provided further quantitative insight into these shifts, allowing us to observe the embrace of a multi-species definition of sentience in our human participants’ opinions on various statements. Although many of the observed attitude shifts were not as strong or detectable as we anticipated, our main finding indicates an overwhelming increase in confidence and decrease in neutrality over understanding of sentience after participating in the Facebook group. We also noted an increase in the embrace of a multi-species definition of sentience that includes all three of our species categories, including companion animals, liminal species, and other wildlife. In particular, the experience introduced several human participants to the concept of liminal species for the first time, invoking an understanding for animal beings in between companions and wildlife for which they previously had no vocabulary. Through this expanded understanding, human participants were able to effectively analyze their interactions with species like rodents and

insects and eventually incorporate these nonhuman animal beings into their understanding of sentience.

The Facebook group was successful in building a community in which we actively participated as researchers (Borda 2006; Contreras 2019). By putting ourselves into the community, we were able to offer guidance and support in the emotional journey of shared

experiencing and discussing sentience with others is much less profound and influential when the primary form of communication is two-dimensional and over a laptop screen.

Another limitation of our study was the difficulty of keeping human participants motivated to post consistently. While this coincides with the limitations of online communication, it also points to the idea that, potentially, many human participants' motivation declined because of the already substantial amount of school work human participants had on a regular basis on top of actively engaging in our study. This connects to the study by Paleco and colleagues that works to create a more inclusive and active involvement from citizens (2021, pp. 261). This is because, the researchers argue, we need to focus less on frequency of participation in general, and instead incorporate more ***inclusive participation*** and the obstacles and discriminatory actions that discourage certain groups to participate: "Just as motivations differ between individuals, they also may differ for the same person at different times. [...] it is necessary to understand the cultural, social, economic, and natural barriers that currently stand in the way of volunteering involvement." (2021, pp. 264). Moreover, as we were not able to enforce any authority to ensure students would continue to participate and engage in the Facebook group, this made it increasingly difficult to change motivation habits and, thus, we received less data for our study. This is another prominent limitation because, if we had received more data that we otherwise would have if all human participants posted more regularly, our sample size would be larger and, thus, more accurate of the overall perceptions of animal sentience in the greater Boston College community.

As our study is not generalizable outside of this specific context, it is implausible to assert our findings are representative of the whole Boston College population. Therefore, a more random and larger sample is needed to engage more members of the community rather than

simply increasing engagement solely by word of mouth to friends. While our sample was fairly random, it holds its biases as our results were extrapolated from responses from many of our friends and peers. As a result, it would be insufficient to state how our data conducted within the Boston College community extends to other people in general and their own perceptions of animal sentience. These limitations presented could not be overcome due primarily to COVID-19 restrictions, time constraints, and physical distance. As we had to conduct all of our research online, this made connecting with human participants difficult and, therefore, imposed more of a time constraint. Seeing as we had only a semester to collect our data, there was not ample time to organize, perform, and evaluate a larger, more random sample of the Boston College student population. If given more time, we would have strived to overcome these obstacles, however we will offer suggestions for future research later in our discussion.

The final limitation orients itself on the very classification tactics used in this work. By classifying animal beings into societally-constructed categories, we recognize that we may have perpetuated these stigmas. Particularly, we recognize the rhetorical choice of using the word

Implications

Our research findings have several implications about the nature of human-wildlife experiences and the importance of acknowledging animal sentience and deepening human perspectives. The method of using a Facebook group to encourage participation in this project indicates that creating, sharing, and reading others' narratives in a community setting can shape and alter individuals' perceptions of sentience. As discussed in our results, people's attitudinal ways of knowing toward liminal and wild species became more positive over the course of Facebook group participation. Perhaps when people share their heartfelt experiences with non-human species with one another, they inspire other members of the community to reflect more deeply and engage with rich, thought-provoking questions about our own nature and how we relate to other creatures of the Earth.

Following Bonisch-Brednich (2018), Conteras (2001), and Richardson (2019), we see that our own posts in the Facebook group as well as comments back and forth with our members created an opportunity for valuable participant-researcher dialogue. Richardson calls on us to not strip away our own humanity by trying to be an academic that maintains his/her distance from the research in order to obtain validity (2009). Sharing our own interactions with sentient life and our own vulnerabilities when it comes to describing what sentience is showed our human participants our glorious authenticity. Thus, our research implicates that truly rich ethnographies allow the researcher to be wholly immersed in their work, without fear of "contaminating" the results, but instead with hope that they illuminate them by allowing for authentic, personal connection between researcher and participant.

It is also shown that sentience of different types of species is socially constructed and can be re-learned through new experiences and exposure to new sources of information. Our

platform served as an educational resource for people to expand their previous conceptions about animal beings that have fallen into certain human-prescribed categories. What was once known as a “pest” may now be regarded as an animal worthy of respect and unharmful treatment. Through our research, we have witnessed that people’s attitudinal ways of knowing towards other beings are malleable. By reflecting on their experiences with a variety of species, many of our human participants have recognized the biases they had ingrained within them regarding the inherent value of certain types of animal beings over others. This implies that our assumptions about non-human species are often subconscious and can be brought to light with active effort and introspection. Our research has opened the door to incredible potential for more caring, intentional relationships between humans and all other animal beings.

Directions for Future Research

In light of the successes and shortcomings of our research, it is with firm belief that the work presented can be used in further literature pertaining to sentience. With such in mind, we posit the following as questions guiding future research in this field. Firstly, while seeking to understand the role of reflection further, we ask: how does repetitive/consistent reflection on animal sentience change our views over time? To understand the impact of facilitation roles in discussion of sentience, we also encourage further analysis on how facilitating conversation/community help us dismantle our own biases towards animal beings. Next, we recognize the utilization of online platforms as a growing mechanism for data collection for research, but we would like to know more on how Facebook groups as a platform can be used to facilitate dialogue and community in the animal sentience field. Finally, we are left with

questions regarding how our research on animal sentience can be used in a way to more effectively enhance conservation efforts of all animal beings?

Conclusion

The research brought forward advances dialogue surrounding perceived levels of sentience between human- and animal-beings. Such a conversation shifts existing modalities toward a principle of coexistence, building upon work by Schauer (2021) and highlighting that evolving definitions of animal sentience are possible through the creation of an online community via Facebook in which critical thinking and a willingness to actively participate in sharing their interactions with animal-beings proved valuable. Through a unique combination of qualitative and quantitative data, key findings such as proximity and location, as rooted in principles of coexistence, help to illustrate perceptions of animal sentience in manners that affect each grouping--of our socially-constructed classification groups deployed including: companion animals/pets, liminal animals/pests, and animals often dubbed "wild"--differently.

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Appendix A
Survey Questions

- Consent question (Outlined earlier)
- Please describe in a few sentences (3-5 sentences) your current relationship with animals.
- Please describe your understanding of animal sentience. (perhaps provide a definition of sentience)
- How often do you regularly interact with animals broadly speaking? Particularly pets/companion animals? Particularly pests/liminal animals? Particular animals often understood as “wild”?
- Pick the extent to which you agree or disagree with the following statements: (strongly agree, slightly agree, neither nor, slightly disagree, strongly disagree)
    - I believe animals are sentient beings.
    - I value a pet’s life more than other forms of animal sentient life.
    - I revere all animal sentient beings equally.
    - I believe humans to be the only sentient beings.

Appendix B

Consent

You are being asked to participate in a research study titled "Reflections on Sentience: Exploring Human Understanding of Animal Sentience Among Companion, Liminal, and Wild Species" that I am completing as part of my research methods course this semester. The purpose of this study is to better understand the role of reflection and profound interactions with wildlife in understanding animal sentience. You will be asked to participate in a pre-survey, upload consistently in the Facebook group detailing your interactions with wildlife, and a postsurvey.

The pre- and post- surveys will not collect your name or other individual identifiers, and the researchers will not have the ability to associate any of your identity with the survey responses that you provide. Similarly, all identifying information, such as usernames, from the Facebook posts will be deleted in the analysis, and the private Facebook group will be deleted onceþMMp ovþ recebÞnÌdhe anal¾ur name

Appendix C

“Hello! This is an invitation to join our Facebook Group called Our Sentient Interactions, a page created by the Environmental Studies Research Seminar class at Boston College. This is a platform we intend to use to create a community where individuals feel called to share profound interactions they have had with non-human animals. In this group, you will be asked to complete a pre and post survey that asks questions about your perception of sentience and your experience with non-human animals. Following the presurvey (link will be provided once requesting admittance into the group) in which consent will be asked for, we would like you to follow the prompts as a guide when writing a written reflection and uploading any photos, videos, or audio you have of the experience. We intend for each member to upload at least twice during our one month of data collection. We then will ask you to complete a post survey after uploading reflections. We hope this Facebook Group will give you a place to reflect on your own experiences, as well as see the value in others’ responses.”

Appendix D