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Media Coverage on Human-Bear Encounters

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Media Coverage on Human-Bear Encounters

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Abstract

Human-bear encounters are on the rise as human recreation and settlement continues to expand and encroach upon bear habitat. As these encounters increase, so does the news and media coverage of encounters that affect societal attitudes toward bears, their habitat, and their conservation. In this paper I will explore the implications of media coverage on human-bear encounters, including management techniques and critiques that influence media coverage and bear populations. The basis for my study was founded on the research question, “How does local media coverage of bear encounters impact societal perceptions of bears?”. Using content analysis of 59 local news stories, I have identified four main themes that are employed to frame human-bear encounters: *Negative Portrayal of bears and bear encounters*, *Positive Portrayal of bears and bear encounters*, *Omission of human impact*, and *Human-Centric Attitudes*. Media coverage of human-bear encounters has the potential to positively impact societal attitudes toward bears, and that bear management resources and media/news outlets must work together to properly educate and inform the public about bears, their habitats, and their need for conservation.

Keywords: human, bear, encounter, media, impact, implications

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Introduction

In October 2022, a woman in Chelan County fended off a black bear in her neighborhood by punching it in the nose (NPR, 2022). Articles such as this one are becoming more frequent in the last two decades as human-bear encounters and attacks are becoming more frequent and bear habitat is taken over by humans through urbanization and expansion (The Guardian, 2021). As encounters with bears continue to increase, coverage of bears and their behaviors will affect the treatment and interactions that will no doubt occur between bears and humans (Neagu et al, 2022). Researching the coverage, either negative or positive, of bear encounters or attacks in the media is integral to understanding our society's view of bears and a change in perception of bears has the potential to change our treatment of them and their habitat, resulting in a more symbiotic relationship with bears in the future. In this paper I inquire into the ways in which bear encounters have been portrayed in the media and what impacts these portrayals may have on societal views of bear encounters. I seek to encourage the conservation required to rebuild bear habitat and populations across the country. I will explore the question, "How does local media coverage of bear encounters impact societal perceptions of bears?"

Reports on bear activity are often coded as negative, even when no harm has occurred, and there are not many reports of human poaching/hunting of bears (Neagu et al, 2022). Coverage of bears is one-sided, and the human component of bear encounters is needed to fully understand the situation. I will be analyzing the negative or positive coding of bears in coverage of bear encounters with the intention of gaining insight into perceptions of bear interactions.

Developing better strategies to deal with human-bear encounters must involve taking into account variables in human behavior and ecological factors (Gore et al, 2006) and addressing bears' interest in human activity as adaptive rather than unnatural or aggressive (Elfström et al,

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2014). Factors such as ecotourism (tourism directed toward threatened wildlife, often intended to support conservation efforts) directed at bears must be closely monitored to avoid encounters (Penteriani et al, 2017) and human recreation must be taken into account when bear encounters occur (Fortin et al, 2016) to address and interpret the current issue of bear encounters and loss of bear habitat that has arisen in recent history.

Although there is a fair amount of research on human-bear encounters and strategies to lessen impacts to both bears and humans, barely any research has been done on media coverage of bear encounters. No content analysis of media coverage on bear encounters was found in my research. This gap is the impetus for my research and I intend to fill the gap in literature on coded language of bear encounters. Research using content analysis of local media coverage to better explain the current societal view on bears and implications of these views will be conducted. I will discuss current literature on the topic of bear encounters, identify gaps in the literature, and explain the four central themes discovered in my research. Lastly, I will continue the conversation on which methods can be taken into consideration when attempting to conserve and maintain bear habitat, and explain the implications of my content analysis.

Literature Review

Background

Human-bear conflicts have taken place for as long as the two species have shared land, but with continually expanding human settlement and recreation across the globe, and bear habitat being increasingly encroached upon, bear encounters with humans and vice versa have become more and more common (The Guardian, 2021). The issue that we now face is that inevitably, as society grows, biodiverse habitat lessens, and human activity draws wildlife with its potential resources. Thus, encounters and potential conflicts with bears will likely continue to

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go up. Statistically, bear attacks are extremely rare, and deaths even more so, but when encounters do occur, it is usually in a human populated area (Floyd, 1999). It is clear that when human-bear encounters occur, it is due to a proximity to human settlements (such as housing, campgrounds, and infrastructure), as well as an attraction to the waste that humans produce (McCullough, 1982). Additionally, as human encroachment on bear biomass has limited bears' ability to access food in their natural habitat, increasing proximity to bear biomass may put humans at risk of bear encounters and draw bears to human-made waste or food (Mattson, 1990). While bears may seem indifferent to human activity, Ordiz et al (2013) found that when exposed to a habitat where human recreation is common, bears tend to keep to themselves, and do not approach humans, but do change their behavior to avoid crossing paths with humans. Overall, human expansion and activities in and around bear habitat have negative effects on bear populations (Morales-González, 2020) with some populations of bears being particularly affected by human recreation such as coastal bear populations (Fortin et al, 2016). As the number of bears decrease and vulnerabilities increase, the importance of maintaining and improving bear habitat for the good of the world and of bear populations in particular is vital, as well as taking into account the impacts of human recreation on the environment (Schoen, 1990). While bear attacks are infrequent, and deaths even less so, bear attacks harm conservation efforts to protect bears (Penjor & Dorji, 2020). Negative impacts on bears, increased bear activity in human populated areas, and bear attraction to human produced waste and/or food culminate in a need for effective management of shared bear and human habitat, which much of the current literature focuses on. However, there is very little literature on media coverage of bear attacks, conflicts, or encounters, or the impact that these coverages may have on aforementioned management of human-bear encounters and habitat.

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Current Literature and Gaps In Literature

The current literature on human-bear encounters focuses primarily on management techniques, and specific examples of how management could be altered or broadened to produce more effective results. For example, Sakurai and Jacobsen (2011) argue that effective programming and education on bear encounters to prevent future incidents should be a factor in management, while Can et al (2014) stress the importance of adaptive management and conflict plans in advance of encounters to mitigate retaliation against bears who have caused harm to local communities. Some researchers suggest a more opinion focused management approach, in which management of human-bear encounters must take into account community opinion and severity of encounter (Heneghan & Morse, 2019), while others suggest that clearer definitions of terms and concepts used in human-bear encounters will improve communication and management within agency personnel when addressing encounters (Hopkins et al, 2010). Other literature focuses on area specific and spatiotemporal aspects to management, stating that, since areas with human development, agriculture, and road kills have the highest rates of human-bear conflict, specific attention should be paid to the management of these areas (Baurch-Mordo, 2008). Gore (2004) argues that human-bear conflicts span an array of geographic and human contexts, and are not just local phenomena, and evaluation of management techniques to address human-bear conflicts is lacking. He argues too that management techniques tend to address human behavior modification, and not vice versa (Gore, 2004). This issue was expanded on by Howe et al (2010), who brought to light the issue that bear related complaints may increase even if human-bear conflict has not, due to external factors such as controversial changes in management, and should not be used to infer trends in human-bear conflict. In all, current literature encompasses many solutions and issues that pertain to human-bear encounters, but not

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many pieces of literature take into account human attitude toward bears before, after or during human-bear encounters, and none take into account media coverage of encounters, and its effect on bears and their habitat. The few pieces of literature that did focus on human attitude toward bears had mixed results as to how humans reacted to the presence of bears in human populated or urban areas. Morzillo et al (2007) concluded that there is uncertainty in regard to attitudes towards bears, which is often caused by lack of knowledge on how to react to a bear.

Additionally, Kellert (1994) discovered a higher frequency of negative attitude towards bears among resource dependent groups such as farmers, who may encounter bears as a nuisance to their living. Don Carlos et al (2009) found that individuals in areas with higher human-black bear encounter frequency were more likely to support intensive actions against bears (lethal control, relocation), however 50% of respondents to a survey had a positive attitude toward black bears in urban areas. This paradoxical attitude has real-world consequences for bears, and the research done on how humans respond attitudinally to bears and coverage of bear encounters is still an uncovered topic.

Theory and Framework

With little to no literature that addresses the main question of my paper, namely, “how does local media coverage of bear encounters impact societal perceptions of bears?” the framework and theory of my content analysis is based largely on the available literature on management techniques and my own theories. As human settlement and recreation increases, so do human-bear encounters, and thus coverage of these encounters. The coverage of the encounters, of who and what is impacted, and how bears are portrayed will impact the attitudes of those who are affected and not affected by bear encounters, and thus the decisions made on bear habitat, bear population, and education on bear related issues. Literature on media coverage

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of bears is, as of yet, very little researched. However, I would theorize that media coverage does not often take into account the human impact on bear habitat and behavior, and may portray bears as a negative force to be dealt with accordingly. If media sources were to take into account these factors, and work with wildlife management to consciously make an effort to bring awareness to the plight of bear populations and their habitat, I would argue that attitudes and actions surrounding bear management and bear encounters would be changed positively.

In sum, literature remains limited on my research question, and the intention of this paper is to fill the gap in literature that is currently present. Using data collection and content analysis I aim to begin this process.

Data and Methods

For collection of data I conducted a content analysis of Washington State media coverage of bear encounters, attacks, sightings, and conflicts. The local news channels chosen were KIRO7, KING5, and KOMO4. Articles were found by searching “bear encounter” on their respective websites (www.kiro7.com, www.king5.com, www.komo4.com) on the search bar. Every relevant article was collected, with dates spanning from 2011 to 2022. Articles that were excluded mentioned any reports on any person, place, thing, or animal other than a bear, bears in zoos, the NFL team the Chicago Bears, articles that were only videos with no text, returns to the wild, articles with error messages, repeats of articles, or repeats of an article with exclusively a video and no text. Data collected was not exclusively reported in the state of Washington, and included any type of human related encounter with a bear such as encounters with pets, cars, and any aftermath of a human-bear encounter. In all 59 results for content analysis deemed relevant to this paper. Content collection was replicable, and a list of all articles are available upon request from the author.

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Data coding was deductive and took place after collection of content. Based on content in the articles, and prior literature I chose 5 questions with which I could code the articles: 1) Did the article portray the encounter as positive? 2) Was human impact on bear habitat and behavior discussed? 3) Did the article frame the victim of the encounter as the bear, the human, both, or neither (specifications were made if the bear was euthanized in or after the encounter)? 4) Was the bear anthropomorphized in any way? 5) Was guidance on how to avoid bear encounters provided? Using these codes as a starting point, I analyzed all articles for evidence related to any of the prior questions. Tracking of data analysis and coding was done in Microsoft Excel, and each article was analyzed manually by the author without the use of software. Every question was coded “YES” or “NO” with the exception of the question on the victim of the encounter. For this question, the codes were “H” for human, “B” for bear, “H/B” for both human or bear, “N” for neither, and “H(BE)” for a human victim with a euthanization of the bear. Every article collected was coded for each question without exception.

The methods used to collect the data were not unique as other researchers have also used local news channels to conduct content analysis such as Lee et al (2014) who compared local and national tv news channels via content analysis. These researchers chose to watch clips of news in their analysis rather than read the text version of local news stories and were coded by length of segment and if the content included topics on cancer. Researchers who looked directly into online news sources, such as Sjøvaag & Stavelin (2012) used analysis software to produce the desired analysis. There was no direct comparison for my content analysis, as the scale was small, and the source specific.

Results

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Four main themes were found in local news coverage of human-bear encounters, 1) *Negative Portrayal of bears and bear encounters*, 2) *Positive Portrayal of bears and bear encounters*, 3) *Omission of human impact*, and 4) *Human-Centric Attitudes*. Each theme arose in a significant amount of articles, and has the potential to shape, whether consciously or unconsciously, the attitude of media consumers. Negative portrayal of bear encounters was by far the most prevalent theme, with 89.9% of content portraying bear encounters as negative. Humans were most often portrayed as the victim of a human-bear encounter, and were framed as such 67.8% of the time, with guidance on how to navigate an encounter mentioned 54.2% of the time. Human impact was mentioned very little and only occurred in 15.3% of articles. Lastly, anthropomorphism of bears was present in 20.3% of articles coded.

Negative Portrayal of bears and bear encounters

In 53 out of 59 articles, human encounters with bears were portrayed as negative. While this theme can be assumed when a bear encounter ends in violence, or perhaps even death, many of the articles covered neither. As mentioned before, bear encounters tend to be coded negative, even when no harm to either bear or human has occurred (Neagu et al, 2022). As Ambarlı and Bilgin (2008) found in Turkey, bear encounters are fairly common, yet almost never lead to death or injury. Despite this, attitudes toward bears are primarily negative, and they are seen as a nuisance. Whether or not the bear encounter ended violently, negative words such as “terror” and “nerve-wracking” were often used in headlines to underline the serious and frightening nature of bear encounters. Other articles framed encounters with bears that did not become violent as suspicious or framed the bear as a perpetrator of a crime. One KING5 headline read “Michigan Hunter Posts Video of Bear Stealing 6-Point Buck He Shot Moments Earlier”. While this headline may not be inaccurate, the use of the word “steal” could infer that the act of stealing

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from the hunter was intentional on the bears part. Negative portrayals of bear encounters were ubiquitous throughout the articles, occurring in nearly every article that was analyzed.

Positive Portrayal of Bears and Bear Encounters

Far less common, but still highly relevant was a positive portrayal of bear encounters, often in the form of anthropomorphism of bears. While only 12 out of the 59 articles explicitly anthropomorphized bears, the level to which they were humanized and portrayed as “cute”, “a guest”, or “calm” stood out against the many negative portrayals of bears in media coverage. One of the more stark examples of this theme was a KIRO7 story that mentioned a bear sitting down at a picnic table “just like a person” who looked “like he was waiting for an elk burger, or maybe just the elk for dinner.” Statements such as this one take the portrayal of bears in a completely different, but perhaps not productive, direction. Stories quoted individuals stating that a bear was so cute they “just wanted to hug him”. While these sentiments towards bears are not negative, they do hold potential for complications in bear management, and for a dangerous precedent of comfortability with bears. While these encounters may be non-problematic, we, as humans, do not know the emotions of bears based solely on their observable behavior.

Omission of human impact

While 27 out of 59 of the articles on human-bear encounters provided a list of guidance or instructions on what to do in a human-bear encounter, not many noted the impact that humans have on the behavior and habitat of bears. 50 out of the 59 articles failed to mention human impact on bear populations. Some articles mentioned bear behavior as related to human behavior with one KOMO4 article stating “The bear’s behavior appeared to be inconsistent with predatory behavior, but rather that of a food-conditioned bear”. While this quote is an acknowledgment of a bear becoming conditioned to human food, it at no point mentions the responsibility of humans

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to deal with waste and food responsibly, or how conditioning bear populations or single bears to human food may have a negative impact on bear populations. There were exceptions to this theme, with a KING5 article commenting that humans should take responsibility for the increase in human-bear encounters and that “It’s a problem with humans” . A lack of accountability on the part of humans in reports of bear encounters was prevalent, and stood in stark contrast to the literature reviewed for this paper, which stated repeatedly that these encounters are mitigatable if humans do their part to restore bear habitat and secure food and waste.

Human-Centric Attitudes

Lastly, the theme that underlies many of these articles is that of a focus on humans, their priorities, and their needs. Unsurprising as this may be, it still must be addressed and understood to fully comprehend the attitudes we have toward bear encounters. Throughout this paper I have discussed this issue as “human-bear encounters”, however, the content I analyzed usually framed this as a human plight, perpetrated by bears. In 40 out of 59 articles, humans were the sole victim of a human-bear encounter. Even when a bear was euthanized in the aftermath of an encounter, the bear was not framed as a victim, but as a liability that had been removed. While this may be true, it does not center on the plight of the bears in these situations, which are ultimately caused by human recreation and settlement.

Discussion

The four main themes that emerged in my content analysis (*Negative Portrayal of bears and bear encounters, Positive Portrayal of bears and bear encounters, Omission of human impact, Human-Centric Attitudes*) along with the statistics drawn from the results of coding the content correlate to both the literature reviewed, and my own theories. The variance in attitude toward bear-encounters reflects a theme in literature of lack of consensus on how to handle bear

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encounters, and whether presence of bears is considered negative or positive (Lowery et al, 2012). The overarching theme of negative portrayal of bears and bear encounters in media coverage may be indicative of a larger issue concerning a negative societal attitude towards bears, and any interaction with them in the wild or urban settings. These portrayals align with my theory that bear encounters are generally coded negative, and the themes of human-centric coverage as well as omission of human impact coincide with my theory that human impact on bear habitat and bear populations is generally ignored in media coverage of bear encounters. The results of my coding revealed the extent to which bears are portrayed as the perpetrator in encounters-not vice versa, and that guidance on how to avoid or diffuse a bear encounter was offered less than 40% of the time. The presence of anthropomorphism and positive portrayals of bears in media often aligned with each other, with anthropomorphism being used to frame bears as approachable, non-threatening, or human-like.

Negative portrayals were pervasive throughout content, regardless of whether or not a violent encounter took place. Considering the rarity of human bear encounters, the presence of strong negative language and an emphasis on avoidance of bears is notable (Smith & Herrero 2018). While this may in part be a result of the rarity of encounters, it still has the potential to carry a societal impact on attitudes toward bears. This theme of negativity, paired with the common occurrence of humans being portrayed as the only victim in an encounter with a bear, brings to light a troubling lack of accountability on the part of media coverage when discussing bears. The lack of recognition and accountability is concurrent with a human-centric agenda, and omissions of human impact confirms the theory that media coverage both highlights humans, and diminishes the challenges bears face in news stories on bears. These interpretations highlight the dominant themes and overarching concepts found in my results.

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Discussions on best management practices are often contested and opinions on how to handle bear encounters vary throughout the literature. Understanding the implications of my results and analysis will require an outline of some of the practices suggested. For instance, Krofel et al (2020) argue that bear conflicts are diverse in type, but are often caused by a few problematic bears, not an entire bear population. They conclude that it may be the best management choice to remove these specific bears and keep bear populations away from anthropogenic foods in these situations. In direct opposition to this stance, Lackey et al (2018) state that bears are drawn to anthropogenic foods, garbage, and waste produced by humans, and while current management strategies have been to lethally or non-lethally remove “problem bears”, this management technique is not sustainable in the long-run. Lackey et al conclude that management techniques must take into account the problems that humans have created, which will produce a more sustainable management system. Some researchers critique current practices outside of the United States, maintaining that the use of diversionary feeding, or using food to distract bears from harvest or human-used areas, is common across Europe, but discouraged in the United States. They argue that this practice may be effective in the short-term, but can lead to higher populations of bears where diversionary feeding takes place, and increase human-bear conflicts (Garshelis et al 2017). A factor not often taken into account in management is variance in weather. Zack et al (2003) discovered that in New Mexico, drier La Niña years were associated with higher rates of human-bear encounters. These examples of current critiques on bear management are examples of a broader push to study and refine bear management and conservation techniques in the United States. In terms of how human attitude itself has implications for bear management, Jochum’s (2014) dissertation found that a variety of factors impact how an individual reacts to a bear encounter, including socioeconomic status, whether the

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encounter happened in an urban or non-urban setting, wildland urban-interfaces, and a recreation subsistence-interest divide. Direct correlations were found between level of knowledge about bears and bear encounters, and a more positive attitude toward bears and bear encounters, as well as a more positive reaction once an encounter had already occurred. This study has implications for the future of bear management approaches and provides a potential complexity within the themes of *Negative Portrayal of bears and bear encounters* and *Positive Portrayal of bears and bear encounters* in that aspects other than knowledge on bears alone affects overall views on how bears and bear habitat should be managed. That being said, training, knowledge, and exposure do play an important role on attitude as Gore et al (2006) found in a study in New York's Adirondack campground. Gore et al observed that campers in Adirondack had a lower perception of threat of bear encounters as opposed to caretakers, whose perception was higher. Slagle et al (2013) simply found that groups are far more likely to accept and have positive attitudes towards bears when educated on bear populations, and their potential benefits, a finding that was confirmed by Cleary et al's (2021) study on human acceptance of black bears. A better understanding of bears and their habits, and the use of safety measures such as bear spray (Smith et al, 2008) are effective preventers of bear encounters, and the incorporation of community education into management is integral to avoiding bear encounters. It is worth noting however that a study by Frank et al (2015) found that groups who live in areas with high risk of brown bear encounters were more likely to support management actions such as population caps rather than the carrying of protective devices such as bear spray, which must be taken into account when incorporating management practices into communities who are at a higher risk of bear encounters.

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The results of my study implicate a need for human impact accountability on the part of news and media purveyors, a shared responsibility for conservation and education, and conscious effort to portray bears in a way that will positively change societal attitudes toward conservation, restoration, and respect for bears. It is within the ability of media and news outlets, both local and national, to change language and coverage of bear encounters to include an acknowledgement of human impact, and ways in which we, as humans, are responsible for creating and fixing the problem of increasing human-bear encounters. Discussions and research on how to improve on bear habitat and encounter management can coincide with communication of research to news outlets, providing these outlets with the latest information and news on how to handle or prevent an encounter with a bear. In addition, it is my opinion that current research on management has the potential to provide a basis for study on how best to educate the public and conserve habitat. Clarity and consistency of terms, definitions, recommendations, and guidance will create a rounded educational starting point for the public to take into consideration when living in or visiting bear populated areas, and generate a new basis for bear education. Based on my results, a change in media coverage of bear encounters has the potential to change public perception and attitudes toward bears, and strengthen a stance for conservation and effective bear management societally. In accordance with these findings, I suggest a closer look into media depictions of bear encounters, and a widespread change in language used in both headlines and articles. These results are replicable if chosen to be, and it is my belief that the suggestions I have provided are both possible and manageable in local and national media and news coverage.

Conclusion

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Throughout this paper I have sought to answer the question “how does local media coverage of bear encounters impact societal perceptions of bears?” in order to understand the implications of how said media coverage affects societal attitudes toward bears, bear-encounters, and bear conservation. Through the use of my data and subsequent results, I can conclude that media’s impact on attitude can have a positive or negative effect on all three of these aspects. There is potential for positive attitudinal shifts if media coverage were to consciously take into account its effect on societal attitude. The themes of *Negative Portrayal of bears and bear encounters*, *Positive Portrayal of bears and bear encounters*, *Omission of human impact*, and *Human-Centric Attitudes* found in my sample of 59 news stories suggest that media coverage is already having an impact on how bears are viewed. Thus it can be concluded that the potential shift in media coverage could change the impact on attitude it already has. As Penjor and Dorji (2020) mention in their study, bear attacks and encounters can lead to negative attitudes toward bear conservation, so coverage of these encounters is vital to how consumers of bear-related news and media react attitudinally. Prior research suggests that, in addition to media and news portrayal of human-bear encounters, effective communication of and updates to bear management must take place to effectively educate humans on bears and their habitat (Sakurai & Jacobsen, 2011). As Heneghan and Morse (2019) conclude, bear management must consider community opinion, which may be influenced by media consumption.

Although bear attacks and encounters are rare (Floyd, 1999), coverage of them is vital to how bears are viewed, and the current research and literature on how media coverage of bear encounters impacts attitude is limited. Limitations to this study include the lack of literature on the subject, as well as a limited pool of data to collect from. Further research on the subject of media coverage of human-bear encounters is suggested to confirm and expand on this content

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analysis. In terms of further research, a broader sample size of news outlets may be necessary, as well as a higher volume of data points to draw from. This study must be the first of many to explore this topic, and input from bear management professionals, news and media outlets, and individuals who have encountered bears should be included in further research. As iterated in the data and analysis portion of this paper, any data and content is available upon request from the author. The research done in this paper is replicable, and can be replicated by examining the content of the data and analysis section.

As bears habituate to human behaviors, foods, and activities (McCullough, 1982), and human-bear encounters increase, a need for a better understanding of current attitudes toward bears and effective management techniques will be vital. If we are to avoid sensationalized stories such as one's that highlight "punching bears in the nose", and bring to light issues of media coverage and management in bear-encounters, continued research is essential.

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