THE WILD IN FIRE: HUMAN AID TO WILDLIFE IN THE DISASTERS OF THE
ANTHROPOCENE

Andrew McCumber

University of California, Santa Barbara

Sociology Department

Email: ahmccumber@@ucsb.edu

Zachary King

University of California, Santa Barbara

Sociology Department

Email: email.zack.k@gmail.com

ABSTRACT

Should you help a wild rabbit fleeing a wall of flame? What is our responsibility to
wildlife affected by wildfire? This paper focuses on two cases of ad hoc public aid to
wildlife that occurred during California's Thomas Fire and were popularized online. We
take the discourse surrounding these cases, a viral video of a man removing a wild
rabbit from the fire's flames and a widespread call to leave out buckets of water for
displaced animals, as an invitation to engage a broader ethical and theoretical
discussion around our individual relationships to wild animals during the age of
ecological crisis termed the Anthropocene. Ultimately, we identify emerging tensions
between what we call 'interventionist' and 'anti-interventionist' positions and assert
that while anti-interventionist positions are framed in rational, empirical, technocratic
terms, a full consideration of already-existing human entanglement with the natural
world troubles this frame. We conclude that the Anthropocene presents unique
circumstances that give substantial support to the interventionist position, while at the
same time we continue to uphold the value of key critiques present in the anti-

interventionist argument which can help to shape the most effective human aid to wild animals and problems of ecological sustainability more broadly.

KEYWORDS

Animals; Wildfire; Anthopocene; Environmental Sociology

INTRODUCTION

On December 4, 2017, a wildfire started near Santa Paula, California, and began its march towards the towns of Ventura and Santa Barbara and into the history books as the Thomas Fire, then the state's largest fire in recorded history. On the fire's third day, as traffic inched through the conflagration along Highway 101, a video clip captured a man on the side of the road, silhouetted by flames, pacing and gesticulating before scooping a wild rabbit from the ground and carrying it away. The clip became a viral phenomenon, shared widely on social media and circulated by a variety of news outlets. Though seen as a heroic moment of compassion and selflessness amidst the fire's devastation, some articles published in the aftermath suggested the man's intervention may have been more harmful than helpful.

Meanwhile, a meme surfaced online, which sparked similar conversations around wildlife and fire. The meme had some variation in wording, but always closely resembled the following text:

> 'If you live ANYWHERE near the forest fires that are currently decimating the (sic) California, PLEASE be aware that the animals are fleeing the fires and they may show up in your yards. The forestry department is URGING you to please bring your animals in at night and let the wild ones pass through. PLEASE put out BUCKETS OF WATER for them. They are scared, exhausted, and have lost their homes. They need to refuel.

As with the rabbit video, the meme's message prompted anti-interventionist responses and came under criticism from those who questioned the advice's official legitimacy and the merits of intervening on behalf of wild animals.

This paper takes these two cases from the Thomas fire as invitations to engage the broader questions around what our relationships are (or ought to be) with the wild animals in our proximity during an age where human activity at the macro level has unleashed unprecedented ecological crisis. At the core of this discussion is the ethical question implied by our two specific cases: should ordinary people intervene on behalf of wild animals, by taking actions like removing them from the proximity of wildfire flames or leaving buckets of water for them outside their homes? Our aim is to offer our best answer to this question, through a thoroughgoing consideration of the numerous social and ecological factors that lie in the background of such debates, such as how the foundations of our relationships to nature may be reshaped in our contemporary socio-ecological moment. In this sense, our inquiry is situated in the context of the age of human-caused ecological crisis many are terming the 'anthropocene', during which our social relationships to the environment and to disaster are undergoing transformations. With that in mind, we will seek to understand how these changing relationships to ecosystems affect our responsibilities to the other animals within them.

The paper that follows is a theoretical analysis of the questions laid out above. The cases from the Thomas Fire serve to focus and situate this analysis, and thus we provide a descriptive content analysis of social media posts regarding each to empirically demonstrate the presence of the discourse around them and to contextualize our broader discussion. We argue the impulse to directly aid wild animals observed in these cases, a perspective we term 'interventionist', and what we refer to as 'anti-interventionist' criticisms of that impulse reflect different ethical calculations, which appear contradictory but may ultimately be reconcilable. While the interventionist perspective is justified by ethical arguments for reducing animal suffering (for example, Singer 1975), it is also significantly motivated by more affective (as opposed to rational or calculated) responses to that suffering and attempts to empathize with the experiences of wildlife. Anti-interventionist arguments, on the other hand, tend to lack overt emotional consideration in favor of apparently impersonal calculations of greater ecological benefit that are less central to the other perspective. These anti-interventionist assessments rest on assumptions that intervention threatens to instill unhealthy dependence in animal populations on human aid or that animals fare better in general when left alone. Both positions are invested in benefiting nonhuman

animals, but they arrive at opposite prescriptions. A primary objective of our analysis is to mediate between the two to glean insights that might advance the broader project of environmental stewardship in our current age of ecological crisis. The tension between these two perspectives indicates the need for a more critical and holistic approach to social responsibility and environmental issues, capable of including macro-level, ecological considerations but also micro-level, interactional ones regarding our affective, personal relations to the nonhuman world that may stimulate environmental concern in the first place.

Humans, Animals, and Disaster: Theoretical Background

Social scientists and humanities scholars have increasingly turned their attention recently to human-animal relations. These authors have often focused especially on domesticated animals (Haraway 2008; Moore and Kosut 2013; Sanders 1999; Tuan 1984), such as Haraway's *When Species Meet,* which seeks an understanding of the perspective of a 'companion species' that transcends the projection of a human perspective (2008). Authors are also increasingly investigating more macro-level phenomena related to the social dynamics of human relationships with wild animals and broader ecologies (Herda-Rapp and Goedeke 2005; Lorimer 2015; Nading 2014; Ogden 2011). Scholars have noted that our interactions with animals tend to be ordered along social terms, such as David Grazian's observation that American zoos must balance realistic presentation of wildlife with audience expectations of animals and their habitats derived as much from social imaginaries as material reality (2015). Similarly, in his ethnography of human-pigeon interactions, Colin Jerolmack explains the birds' status as urban pests by noting that animals are revered only as far as they fit 'particular socially defined roles and places in our otherwise human communities' (2013), a threshold not met by pigeons.

With these perspectives in mind, this paper uses the discourses around the water buckets meme and the rabbit video as cases through which to analyze the nuanced ways people, animals, landscapes, and disaster become 'entangled' (Nading 2014; Slater 2001; Tsing 2015). We consider these cases in the context of human-animal relations, as they relate to popular conceptions of the environment and nature. Recent environmental sociologists have examined the social and cultural elements that conspire to establish 'nature' as a meaningful entity, rather than an essentialized

category to be incorporated into sociological analysis. Particularly, these scholars have turned to micro-sociological theories to demonstrate 'how nature is made social at the level of the interactional encounter' (Angelo 2013:352). For example, Jerolmack and Tavory argue that nonhumans serve to establish group membership and identity in the absence of other humans, as parts of Mead's 'generalized other' (2014). Some authors have written that conceptions of 'nature' are established in the course of intimate, context-specific interactions with the nonhuman world, a process Gary Alan Fine calls 'naturework' (1998, 1997). For Hillary Angelo, different such 'experiences' with the nonhuman world, which are 'affective' and 'intimate' in character, establish distinct 'natures' that may appear incommensurable to each other, such as the disparate modes through which birders and ornithologists love birds, the former 'through binoculars', the latter 'through the barrel of a shotgun' (2013:351).

This article will further this investigation of our micro-level interactions with the nonhuman world, which are formative of ideas of nature, by drawing connections between these and the macro-level, political-ecological problem of disaster in the 'anthropocene.' There has been an interdisciplinary scholarly push to recognize a new geological epoch, characterized by a dominance of human influence over the earth's natural systems (Crist 2013; Lewis and Maslin 2015; Neimanis, Åsberg, and Hedrén 2015). We will engage the question of the extent to which we can understand and empathize with the perspectives of nonhumans, a key preoccupation of the interactionist literature discussed above, but specifically we will consider these attempts at empathetic understanding as they relate to our changing responsibilities to other beings within our current socio-ecological moment. What are the terms of our affective, intimate interactions with nonhumans during times of disaster? How do the extraordinary environmental circumstances of today affect the way different 'natures' are produced in these interactions, and in turn, how we popularly understand our obligations to wildlife? In engaging these questions, we build on past work emphasizing the connections between affect and environmental concern (Dallman et al. 2013; Seaton 2013; Weik von Mossner 2013) and assert that these emotional, interactional engagements with nature are an important resource for addressing broader ecological issues.

Part of our discussion will involve the experience of environmental disaster in the age of the anthropocene. In terms of the cases we consider, our paper proceeds from the notion that the Thomas Fire was a 'disaster' specifically insofar as the way it unfolded in relation to the social processes in its proximity. Wildfire, perhaps more than any other kind of disaster, has complex social and nonhuman factors that make it simultaneously 'natural' and not in popular imaginations. In other words, the Thomas Fire may be experienced as an external force conspiring to torment Southern California cities and towns, but the social experience of the fire was not dictated exclusively by the extrahuman force of the conflagration itself, but also by the development patterns of the cities in its path, the social relations contained within those cities, and the anthropogenic factors that may have contributed to causing it. This perspective echoes Environmental Justice approaches that treat disasters as 'injustices in waiting', or events that expose, rather than manufacture social power relations (Caniglia and Frank 2017). Given this paper's topic, we likewise must consider how those human-animal relationships during the fire are themselves socially constructed, and how that social construction is affected by the context of disasters like wildfire.

By engaging a nuanced approach to disaster and putting it in conversation with the discourse on the anthropocene, we hope to reveal connections between micro-level interactions in which animals are considered as individuals, and environmental concerns where they are treated as undifferentiated parts of a broader ecology. The ecological importance of the impulse to empathize with nonhumans on an intimate level is an important area of inquiry given the ongoing changes to global environmental conditions. The crises we face, existential in magnitude, make the investigation of these questions not only necessary but urgent.

Empirical Case: A Rabbit Rescue and a Call for Water Buckets

Two viral phenomena from California's Thomas Fire of 2017 provide a useful vantage point from which to discuss the unique problems around aid to animals during the anthropocene. The video of the 'rabbit rescue' along highway 101 in the fire's early days garnered significant public attention both in online news media and social media. The 'Water Bucket' meme, meanwhile, did not originate in the Thomas Fire, but during fires in the Pacific Northwest, resurfacing in two major fires thereafter, each time becoming widely shared enough to garner criticism of the call to action from public wildlife

agencies and others (Scauzillo 2017). Together these cases demonstrate how the Thomas Fire became a touchstone event in the broader cultural/environmental moment within which it took place. The discourses they generated reflect a widespread public desire to assist wild, nonhuman animals during disaster and a celebration of instances where people attempt to do so. Each of these cases generated pushback, particularly from government agencies tasked with environmental management, on the grounds that the type of aid to animals they suggested or celebrated may either be harmful to the animals in question or to the ecology more generally. Below we will discuss how the tension at the center of this debate, between the merits of intervening to assist animals or not, reflects a broader struggle to ethically square our most personal interactions with the nonhuman world with our environmental values in an age of unprecedented human-nonhuman entanglement and ecological crisis. Anchoring this discussion in the cases presented offers the opportunity to observe an example of how this disorienting personal experience of the anthropocene plays out on the ground.

To provide context for our discussion, we offer a descriptive qualitative content analysis of social media comments to demonstrate the shape that discourse around these two cases took. We analyzed comments on the social media platform Instagram related to each case. For the rabbit video, we sampled comments from the original post of the video by the Southern California news station ABC 7 on its official Instagram page.[1] To the extent it is possible to determine the origins of Instagram posts, we have identified this as the first, most widely-shared, and most extensively interacted-with Instagram post on the subject, making it ideal for gaging the general discourse around the video. In addition, the post was made by a popular and well-established news outlet, indicating that the user base following the Instagram account and responding to the post is likely to be diverse and substantial compared to, say, a post from a niche interest group. At the time of sampling, there were 837 comments on this post. 703 were deemed 'substantive comments', meaning they contained some content besides the names of other Instagram users the commenter tagged.[2] We coded the posts interpretively, with the following categories emerging as salient themes:

---

[1] Instagram comments in both qualitative content analyses were collected using the social media analysis tool Postchup.

[2] A common use of the comment feature on platforms like Instagram is to 'tag' another user to share a post directly with them. Though posts that exclusively contain these tags these are technically 'comments,' their

1. **Positive Reaction to Video:** Comments were coded 'yes' if they included a reaction to the video that was generally positive or praising of the man and his actions. These often included positive emoji symbols such as smiley faces and hearts.

2. **Negative Reaction to Video:** Comments were coded 'yes' if they included a negative evaluation of the man in the video and his actions.

3. **Sadness:** Comments were coded 'yes' if they expressed sadness, using either words or emojis.

4. **Heroism:** Comments were coded 'yes' if they used language that described the man in the video as a hero, as brave, or as courageous.

Of the 703 substantive comments in our content analysis, 70 per cent explicitly expressed a positive evaluation of the man's actions, compared to only 5.3 per cent of posts that evaluated the act negatively. Of the 529 total posts that expressed a reaction, positive or negative, to the video, 93 per cent reacted positively. 16 per cent of those positive posts used language that described the man as brave or heroic. The overwhelmingly laudatory response to the video clip represents a support for an interventionist perspective characterized by a general sense of a moral responsibility of people to protect wild animals from the fire, or a virtue in doing so (Table 1 here). This popular reading of the event describes a specific perspective regarding what makes nature valuable or worth protecting that informs the celebration of the rabbit rescue. This perspective makes a moral calculus in this respect, the terms of which are divergent from those accepted by those who would rebuke the man's actions on the grounds that they were ecologically irresponsible.

For the 'water buckets' meme, we conducted a similar content analysis to gauge the beliefs about human/wildlife relations reflected in the discourse and reactions it generated, which sampled comments on the most popular Instagram post on the phenomenon we could identify (which garnered 106,966 'likes'), made by actress Emmy Rossum on December 6th, 2017. While the water bucket meme was shared dozens to hundreds of times across platforms, it would be difficult (if not impossible) to

function is different from those that include a response or commentary, and were thus excluded from our n-values when calculating percentages.

provide any full accounting of all these posts. The Rossum post was chosen because it was publicly accessible, it was made specifically in relation to the Thomas Fire (as opposed to posts with nearly identical content made months earlier in response to other fires) and it garnered significant attention in one easily observable format. The fact of it being a 'celebrity' account, and one for a popular television actress not particularly strongly associated with animal rights activism, raises the possibility of a large group of people with potentially divergent views on wildlife viewing and interacting with the post. Of 556 comments, 509 were deemed 'substantive' based on the criteria above. The substantive comments were coded as follows:

5. **Support:** Comments were coded for 'support' when they indicated a positive attitude toward the original poster for sharing the post. These ranged from heart emojis to expressions of admiration for the original poster.

6. **Sadness:** Comments were coded for sadness when they expressed sad emotions in response to learning of the plight of the wild animals described in the meme. These ranged from 'broken heart' or crying face emojis, to expressions like 'I just feel so bad for those poor animals'.

7. **Dismissal:** Posts were coded for dismissal when they belittled the poster for their concern, belittled the issue described as unimportant, or portrayed wild animals as undeserving of concern.

8. **Skepticism:** Posts coded for skepticism expressed doubt about the efficacy or benefit of taking the actions described in the post (leaving out water buckets for animals).

9. **Claim of Action Taken:** This coding describes comments in which the author claims to have actually followed the instructions of the meme and left out water buckets for wild animals.

10. **Reference to Official Wisdom or Policy:** Comments coded under this heading made reference to an outside authority. Some included links to articles sourcing information from official agencies of some kind.

Our analysis revealed information both about public support for and hostility to the idea of helping wild animals. The majority of comments, 274, expressed support for the meme and for Rossum's concern for wild animals. 246, 48.3 per cent of comments,

expressed sadness and concern for the plight of wild animals, with considerable overlap with the 'support' category. These results mirror the discourse observed around the rabbit video case, as each reflect a general sense of empathy for wild animals and a desire to help them in the methods suggested. 3.3 per cent were dismissive of or hostile to the idea, and 2.1 per cent were skeptical that it would help. Eight people reported that they had actually taken the action recommended. Two of those who were hostile expressed a desire to kill and eat the wild animals, while several other commenters felt that people expressing their concern for wild animals should take that concern further and adopt a vegan diet. Five comments made reference to outside authorities, such as online articles citing California wildlife agencies, to back their claims – these were all 'skeptic' posts that sought to rebut the meme's claims. (Table 2 here)

   The reference to outside authority is intriguing given the meme's false claim to have originated with a nonexistent 'Forestry Department.' Despite this claim, representatives from actual public agencies concerned with regulating and protecting wildlife publicly opposed the meme's call to leave out water for displaced animals. Both an article in the Pasadena Star-News and another in the San Francisco Chronicle that responded to the meme's emergence during the Bay Area fires of earlier that year, cite representatives from the California Forest Service and the Department of Fish and Wildlife who urge the public not to provide water to animals due to the danger of 'habituation' – animals growing accustomed to humans as a food source, generating dependency and potentially danger for both humans and nonhumans. Similarly, as we will discuss in more detail below, multiple publications ran stories rebuking the celebration of the rabbit video, on the grounds that wild animals like rabbits are adapted to fire and will fare best if left alone. The anti-interventionist positions reflected in these articles and those of their interventionist counterparts reflect a tension between analyses that diverge along the lines of ethical calculus and priorities regarding proximate individual animals versus broader ecological considerations. In the next section we discuss this tension further and consider these divergent perspectives in light of the anthropocene's effect on our relationships to the nonhuman world.

The Bird and the Window Pane: Conceptualizing Human Aid to Animals in the Anthropocene

In both cases from the Thomas Fire, proponents of direct human aid to nonhuman animals cast it as a loving, brave, heroic and thoughtful act. Much of the basis of this celebration is in the imagined experiences of beings with which humans cannot directly communicate. We imagine that an animal is scared, or suffers, based on assumptions about its proximity to how we ourselves would feel if confronted with the animal's circumstances. How accurate is this projection? Even human communication is mediated through our own internal and socially-generated structures of meaning (Goffman 1956), and it is quite common (and necessary for a peaceable social life) to empathize with even those other humans with whom we may never communicate linguistically. However, empathy with other humans proceeds from a much more direct adjacency of experience from which to imagine the experience of the Other (relatively similar cognitive anatomies, cultural universals, etc.). Empathy with nonhuman animals relies much more on elaborated assumptions of what the experience of the Other must be like.

These assumptions deny a great deal of the potential for accountability and correction *from* the Other that are the guiding stars of any potentially beneficial application of empathy. After all, helping is not helping if the help is unwanted. Feminist scholar Sandra Harding, in explaining the importance of standpoint epistemology, charges not only that research and thought ought to begin from the position of the marginalized, but that these projects ought to proceed through 'democratic dialogue' with the relevant knowledge-producing groups (Harding 1992:582–584). While early sociologists of human-animal relationships suggested that their work, in assuming the ability of humans to communicate with nonhuman animals, mirrored feminist efforts to fully include women and women's agency in scholarship (Sanders and Arluke 1993), critics have pointed out that this assumption, that humans can articulate the thought of nonhumans without their critical input, is akin to asserting that women themselves are superfluous to feminist thought (Hilbert 1994).

In keeping with Harding, we must recognize the danger in such assumptions and problematize the help being attempted in both of the cases studied on this basis. Interventionist and anti-interventionist arguments wrestle, implicitly or explicitly, with the question of our capacity to understand both the perspectives of individual animals (can we be sure that an intervention does indeed relieve the suffering of the targeted

animals?) and the broader ecological realities that might be affected (could any potential help be outweighed by potential downstream ecological effects?). These considerations inform the central ethical question of whether or not to intervene in ways like those observed during the Thomas Fire. Without drawing all-encompassing answers about the possibility of mutually empathetic inter-species relationships, we develop areas of theoretical consideration that may help outline the best paths toward such answers and inform efforts in the broader project of environmental stewardship.

A key element in helping navigate this problem, specifically as it relates to helping, is an animal's capacity to recognize harm it faces and whether or not that harm is caused by humans. Lori Gruen (2015), in seeking a more productive form of empathy with nonhuman animals that duly considers the entanglement of human and nonhuman lives, notes that the assumption that we can understand the perspective of animals may lead to harmful errors in judgment. In this sense, the extent to which we can be sure that an intervention is helpful to an animal varies depending on the particular elements of multispecies entanglement at play in a given context. Consider, for instance, a common scenario: a bird trapped inside a room, attempting to escape through a closed window. It is clear to observing humans that a bird, slamming itself repeatedly against the glass does not understand the barrier it faces. The invisible barrier of window glass is a feature unique to human-generated ecologies. In this case, physically intervening to aid the bird is of clear benefit – not because we can assume a high level of understanding between birds and humans, but rather a low one; we cannot communicate what a window is to the bird and it is apparent that its lack of understanding is causing harm.

Compare this to animals faced with wildfire. It is relevant to note that there are important ecological factors that typically are absent from the lay public's understandings of wildfire and assumptions about animals' experience of it. Though Southern Californians experience wildfires as external agents of destruction, fire is an important ecological process in the forest of Santa Barbara and Ventura Counties. Thus, there is often a failure to appreciate the ecological realities of the proximate world in the way popular discourses characterize these conflagrations. We can observe this, for example, in news articles like those that emerged during the Thomas fire comparing its boundaries to the size of major urban areas, effectively obscuring the important

qualitative distinction between a fire consuming 200,000 acres of chaparral and one burning an equally large portion of New York City. While fire is an important, regenerative aspect of nonhuman ecologies in Southern California, it is simply destructive to the human-built ecologies within them. With this in mind, any attempt to empathize with animals' experiences of wildfire ought to contend with the notion that fire may be uniquely destructive to human ecosystems and that our human experiences of it might not be transferrable to those of wild animals.

This was a point raised by anti-interventionist perspectives in articles published in the wake of both the rabbit video and the water bucket meme, which instructed the public to cease attempts to help, on the grounds that wild animals are adapted to fire and can fend for themselves in these circumstances. An article on the website LiveScience, citing several relevant scientific studies, claims that the rabbit may have been harmed for this reason by the rescue caught on video, as it may have been attempting to rescue a litter of its young.[3] Whether this was truly the case, the article contends that our lack of knowledge of the rabbit's intentions and full situation is reason enough not to intervene (Letzter 2017). Meanwhile, wildlife agency workers cited in the Pasadena Star-News plainly instruct people not follow the water meme's suggestion to leave out buckets, arguing that this intervention may foster in the animals an unhealthy dependence on human aid (Scauzillo 2017). As Peter Tira of the California Department of Fish and Wildlife stated, 'you should let the animals take care of themselves.' This attitude has been echoed in other circumstances, such as the Bay Area fires of Fall 2017 (Robertson 2017) and the severe droughts striking the western US in recent years (Fears 2015). The published opinion of government wildlife management agents appears decidedly against ad hoc aid to nonhuman animals. While public resistance to this wisdom suggests both a personal desire to help animals and a distrust of government experts as the best sources of truth, it also takes place within a context of emergent populist hostility toward experts that is often mobilized in anti-scientific, anti-ecological right-wing agendas (see Rigden and Stuewer 2012, Hayward 2014, and Levy 2018). It would be easy, but misleading, to view the ensuing conflict as a clash between rational-scientific expertise and layperson reaction.

---

[3] While this anti-interventionist critique is levied with appeal to scientific rationality (specifically reference to expert research in wildlife behavior), it is notable that it functions as a moralistic and anthropomorphizing appeal as well, prompting us to consider the rabbit as a concerned mother saving its children. This is not dissimilar to the interventionist readings of the event that treat the rabbit itself as in need of saving.

One strong critique of this anti-interventionist argument can be levelled on utilitarian grounds. In a 2010 article, ethicist Jeff McMahan addresses the argument for human intervention in wild nature through an exploration of the possibility of ending wild animal predation. McMahan rejects the idea that animal suffering can be ignored on the basis that it is not caused by human activity when in fact humans have the ability to intervene. The location of suffering in non-human nature does not make the suffering any less. In other words, the artificial divide between what is 'nature' and what is 'human' is not a logical basis on which to determine which suffering matters and should be prevented. While utilitarian arguments can be made in defense of some of the anti-interventionist points as well, explored below, McMahan makes argues compellingly that suffering cannot rightly be ignored simply on the basis of it being 'natural' (i.e., not caused directly by humans).

Moreover, the anti-interventionist responses look different in the hot sunlight of the Anthropocene. Rather than a conflict between rationality and emotionality, this may be a conflict between positions of ethical philosophy; One rooted in an assumption that wild animal and human worlds can and should be disentangled and distanced, and the other taking the view that today, such disentanglement is impossible and undesirable. Jamie Lorimer (2015) raises important theoretical questions about how wildlife, nature, and conservation can be accurately conceptualized in light of the deepening entanglement of human activity with all aspects of the world's ecosystems, generating unprecedented change. Many anthropogenic factors, including climate change, are likely to have contributed to the Thomas Fire's unprecedented size and intensity. For this reason, assumptions that wild animals in fire-prone regions are adapted to fire may be in question. This particular assertion relies heavily on a landmark study on animal behavior in fire, which itself indicates that even well-adapted animals could be endangered by fires made more intense by the human impact of burn prevention (Komarek 1969). Within the contemporary context of unprecedented ecological crisis, wildfires, rather than merely a 'natural', ecologically necessary process, might best be conceived of as agents of what Rob Nixon terms 'slow violence': the insidious effects of human influence on the environment that '[occur] gradually and out of sight' (Nixon 2011). The unprecedented frequency and intensity of fires in the context of a warming planet creates a dangerous new physical environment likely as incomprehensible to

wild animals as the glass that traps a bird indoors – therefore providing a compelling argument that humans ought to intervene where animals' understanding and instinct may prove inadequate to survival in this new world.

Whereas it may be impossible to determine whether intervening on behalf of wildlife in fire is 'helpful', we likewise can no longer confidently assert that unprecedentedly large fires like the Thomas Fire are simply parts of a 'natural' ecological process. Moreover, can animals be expected to 'take care of themselves' when fires are taking place in a context of unprecedented drought, heat, and other chaotic conditions? In terms of assessing whether animals need human assistance, all nature in the Anthropocene begins to look more like the bird trapped in a room, trying in vain to pass through a glass window. It is also important to note that ecologists themselves do not always share the same strict opposition to direct, public intervention to assist animals, and so a clearly identifiable 'authoritative' position on the issue of public intervention may be troubled for multiple reasons (Jones 2018; Morris 2017).

In short, the notion of the anthropocene troubles the already fraught ethical question of whether to intervene on behalf of wild animals. In trying to mediate between the interventionist and anti-interventionist perspectives, it is important to consider the lessons of sociological work from the interactionist perspective, which tells us that 'nature' is made for us at the level of individual experience (Angelo 2013; Jerolmack and Tavory 2014; Fine 1997, 1998). In other words, the way the nonhuman world moves us, affectively, is importantly grounded in our personal interactions with it and the meaning that coalesces around animals, plants, sights, smells, and landscapes as an ever-evolving result of those interactions. There are a couple important implications this has for thinking through the ethical question of aiding animals during the anthropocene. First, as noted above, the Anthropocene is a sea change to both human and nonhuman ecologies, and so our micro-level interactions with the nonhuman world take on an entirely different significance due to profound macro-level contextual changes. Given the preexisting and deep entanglements of human and nonhuman ecologies, ethical opposition to intervention on the assumption that animals know best how to take care of themselves during disaster is increasingly difficult to justify.

Second, the anthropocene may be a macro-level phenomenon characterized by ecological crises playing out on a global scale, but small scale interactions with the

nonhuman world remain foundational to our social relationships with nature. Contrary to what is suggested by the seemingly more emotionally muted appeals to scientific rationality from the anti-interventionist perspective, affect and attempts at empathy with and direct aid to nonhuman Others can also be rooted in equally rational, careful consideration of the broader project of environmental stewardship. Embracing the reality of the anthropocene means realizing that claims to scientific detachment underpinning anti-interventionism rely on the false assumption that 'nature can take care of itself' and that therefore it is simply emotional wrongheadedness that leads people to help animals directly. Human and nonhuman ecology is totally intertwined in a more immediate way than ever before – therefore interventionism cannot be said to lack rational bigger-picture contextual consideration.

The public desire to help wild animals through direct practices is not only well-founded in a consideration of the new level of ecological entanglement represented by the anthropocene; it is also a potentially powerful resource to address the crises presented by this situation. Given this ecological entanglement, we can conclude that the ad hoc aid to wildlife in the two cases from the Thomas Fire were ethically justified, regardless of whether the human actors were considering the relevant context explored in this paper. It is safe to say that wild animals facing the newly intense and frequent disasters of the anthropocene are indeed like the bird trapped in the room, facing unnecessary suffering and unable to understand their new physical environments. Nonetheless, the anti-interventionist perspective suggests legitimate and persistent issues that make ad hoc intervention problematic as a policy. While dependence on human aid is likely preferable for an animal than burning to death in a fire in the short term and on the individual scale, the anti-interventionists are correct that widespread direct aid to animals has the potential to create greater suffering in two ways: By creating conflict between humans and animals via dangerous proximity (with large predators especially), and by rendering wild animals dependent on human aid that could later be withdrawn, leaving animals without stable survival patterns. Better forms of aid to wild animals may require the guidance of ecologists and wildland managers to avoid real dangers to wild animal existence posed by habituation (Mathews 2013). However, the harm generated by everyday practices of the global industrial economy require human intervention that goes beyond traditional conservation in order to

deconstruct the systems responsible for ongoing destruction and to build better ones. To do this effectively, we must look honestly at our entanglement with all nonhuman beings and profoundly reconsider the ways we come to relate to them. The cases studied here represent a public impulse that can be harnessed toward this end.

Conclusions

The observable desire to directly help wild animals in the two cases from the Thomas fire suggests broader ethical questions regarding human intervention on behalf of nonhumans. The anti-interventionist position opposes the sorts of actions taken in these cases on the basis that they may be harmful rather than helpful to the animals in question and because they could potentially have adverse downstream ecological effects by habituating animals. We have discussed both the pitfalls of assumptions regarding the perspectives of nonhuman animals that provide support for anti-interventionist arguments as well as the ways the ethical question of intervention and this related problem of understanding across species is complicated by the changing material and ecological realities of the anthropocene.

The practice of helping nonhuman animals can be problematized on the basis of a lack of potential for meaningful communication between parties, as this presents a danger that help could be unwanted or harmful. However, the assumption that animals in nature are well-prepared for wildfire appears dubious in the face of rapid anthropogenic change. Human-generated ecologies are more entangled with other ecologies than ever before, and human transformation of the global climate guarantees that all non-domesticated creatures will feel this no matter how distant their immediate ecologies are from urban centers. While no human can claim to know what animals 'want', they can know what dangers are presented by human activity that animals are unlikely to understand or prepare for.

There is a certain hubris to the assumption, implied by the notion of the anthropocene, that nothing could possibly exist beyond humanity's touch, though this concept surely complicates the stark division between society and nature that informs our concept of 'wildness.' If nothing else, the anthropocene compels us to consider wildness as not simply a binary opposition between things humans influence and things they do not, but rather a metric of the extent to which an animal, plant, or some nonhuman is capable of existing autonomously from sustained active human

intervention. Another way of stating this is that rather than being either wild or domesticated (or 'habituated', even), animals can be ordered along a spectrum of totally wild to totally domesticated, defined by the degree of their dependence on continued human help. Even if anthropogenic factors transform all ecological processes into socio-ecological ones to some extent, the exact degree to which human agency is a dominant influence varies. Given this, we can see how carefully considered human action to help animals can actually promote wildness rather than restrict it. At first blush this may appear paradoxical: How can help to wild animals not inherently generate dependency? There is a strong argument to be made for the anti-interventionist side that aid to wild animals creates cycles of dependency that can be harmful in the long term by promoting conflictual proximity between humans and wildlife, or by rendering animals more vulnerable to the fickle pendulum swings of human politics as it relates to the environment. However, consider how that help, appropriately structured, might instead promote a thriving, self-sustaining ecology, or create lasting infrastructure that doesn't require intensive ongoing human intervention. A particularly important task of environmental stewardship in the anthropocene is to simultaneously acknowledge that human processes penetrate even the most remote ecosystems (in other words to dispense with absolute notions of a wholly external 'wilderness') while simultaneously working to value the notion of animal autonomy where it exists and to increase it where possible. This argument brings the anti-interventionist critique to bear on interventionism, producing a framework to inform an interventionism appropriate to our times.

Furthermore, human help to animals cannot be opposed simply on the basis of avoiding increased human involvement; this involvement is already certain, even if only through the more distanced mechanism of climate change. Additionally, the project of environmentalism, even in an age where the most pressing issues are global in scale, is importantly motivated to a large degree by the meaning and values we attribute to the nonhuman world through our small scale interactions with it. Given this, it is important for direct intervention to have a place within the work of environmentalism, lest its goals become damagingly abstracted from human experience. There are, of course, limits to direct intervention motivated by personal experience with nature as a model for environmental responsibility. For example, in the case of the Thomas Fire's rabbit

video, it would be hard to imagine the same rescue playing out with a less traditionally charismatic animal like an opossum or a skunk. Indeed, many species who are worthy of intervention and protection for many important ecological reasons are much less likely to inspire the feelings of affinity and the affective response that might immediately motivate action (consider, for instance, the well-publicized plight of the honeybee and so-called 'colony collapse disorder'). Nonetheless, we can consider how aid to nonhumans can preserve or strengthen animal autonomy and how government wildlife officials can aid the public in becoming involved. Rather than being discouraged from helping wild animals, publics could be invited into the effort to aid the safety and autonomy of wild animals through well-informed interventions.

What could this look like? We might begin by noting that the results of the rescue in the rabbit video eventually involved professional agencies such as the California Wildlife Center, which ultimately released the rabbit (Brown 2018). Intervention in the form of care and rehabilitation of wild animals is an already widespread practice. But concerned publics could be brought into other efforts as well, including proactive ones to help animals before disaster strikes. Wildlife bridges, which help animals maintain migration pathways otherwise obstructed by human infrastructure, are increasingly common (Gužvica et al. 2014) and (if this suggestion proves to be supported by empirical ecological study) could provide a valuable survival path for animals like the rabbit trying to escape fire. Strikingly similar to the advice of the water buckets meme are wildlife 'water troughs' built by humans to maintain accessible water sources for wild animals (Brigham and Stevenson 2003) in intensified drought cycles without generating issues of habituation – but these troughs, notably, do not encourage a problematic proximity to intensively human-populated areas, and do not require the sustained labor of individual human helpers. Instead, these forms of aid require only basic maintenance – surely generating a lesser degree of dependency. As we've argued, total independence of all wild animals from human aid is impossible as without human intervention at this point ecological crisis will continue to wreak massive destruction. Dependency, however, can be limited. The hybrid interventions discussed here seem notably suitable for the Anthropocene, a period marked by near total human/ecological entanglement. The anti-interventionist argument brings to bear valuable insight into the potential problems of human intervention to help wildlife, but our evaluation finds

that in light of the reality of human/ecological entanglement, human intervention continues to be ethically justified, provided it is well-considered in terms of radiating and long-term effects. The crisis we face calls for an expanded attention to creative interventions, and a retheorization that recognizes the public desire to become involved as a valuable resource to be harnessed for more ecologically sound futures.

References

Angelo, H. 2013. 'Bird in Hand: How Experience Makes Nature'. *Theory and Society* 42(4):351–68.

Brewster, B. and M. Bell. 2009. 'The Environmental Goffman: Toward an Environmental Sociology of Everyday Life'. *Society & Natural Resources* 23(1):45–57.

Brewster, B., and A. Puddephatt. 2017. *Microsociological Perspectives for Environmental Sociology*. London: Routledge.

Brigham, W. and C. Stevenson. 2003. 'Wildlife Water Catchment Construction in Nevada'. US Bureau of Land Management Papers. pp. 25.

Brown, H. 2018. 'Rabbit Rescued from Fire Returns to the Wild'. California Wildlife Center, http://cawildlife.org/community/rabbit-rescued-from-fire-returns-to-the-wild/ (Accessed March 1, 2018).

Caniglia, B. and B. Frank. 2017. 'Revealing the Resilience Infrastructures of Cities: Preventing Environmental 'Injustices-in-waiting''. in B. Caniglia, M. Valée and B. Frank (eds.), *Resilience, Environmental Justice and the City*, pp.57–76. New York: Routledge.

Crist, E. 2013. 'On the Poverty of Our Nomenclature'. *Environmental Humanities* 3:129–47.

Dallman, S., M. Ngo, P. Laris, and D. Thien. 2013. 'Political Ecology of Emotion and Sacred Space: The Winnemem Wintu Struggles with California Water Policy'. *Emotion, Space and Society* 6:33–43.

Fears, D. 2015. 'Wild Animals in Drought-Stricken Western States Are Dying for a Drink'. The Washington Post, https://www.washingtonpost.com/national/health-science/animals-in-the-wild-are-dying-for-a-drink-in-the-drought-stricken-west/2015/05/06/260312aa-eac6–11e4–9767–6276fc9b0ada_story.html (Accessed February 28, 2018).

Fine, G. A. 1998. *Morel Tales: The Culture of Mushrooming*. Harvard University Press.

Fine, G. A. 1997. 'Naturework and the Taming of the Wild: The Problem of 'Overpick' in the Culture of Mushroomers'. *Social Problems* 44(1):68–88.

Goffman, E.. 1956. The *Presentation of Self in Everyday Life.* New York: Anchor Books.

Grazian, D. 2015. *American Zoo: A Sociological Safari.* Princeton NJ: Princeton University Press.

Gruen, L. 2015. *Entangled Empathy: An Alternative Ethics for our Relationships with Animals.* New York: Lantern Books.

Gužvica, G., I. Bošnjak, A. Bielen, D. Babić, B. Radanović-Gužvica and L. Šver. 2014. 'Comparative Analysis of Three Different Methods for Monitoring the Use of Green Bridges by Wildlife'. *Plos One* 9(8):e106194.

Haraway, D. 2008. *When Species Meet.* Minneapolis, MN: University of Minnesota Press.

Harding, S. 1992. 'After the Neutrality Ideal: Science, Politics, and 'Strong Objectivity''. *Social Research* 59(3):567–87.

Hayward, S. 2014. 'Conservatism and Climate Science'. *Issues in Science &Technology* 30(3):52–57.

Hilbert, R. 1994. 'People are Animals: Comment on Sanders and Arluke's 'If Lions Could Speak''. *The Sociological Quarterly* 35(3):533–36.

Herda-Rapp, A. and T. Goedeke. 2005. *Mad about Wildlife: Looking at Social Conflict Over Wildlife.* Boston: Brill.

Jerolmack, C. 2013. *The Global Pigeon*: University of Chicago Press.

Jerolmack, C and I. Tavory. 2014. 'Molds and Totems: Nonhumans and the Constitution of the Social Self'. *Sociological Theory* 32(1):64–77.

Jones, D. 2018. *The Birds at My Table: Why We Feed Wild Birds and Why it Matters*. New South Wales, Australia: University of New South Wales Press.

Kuhn, T. 1962. *The Structure of Scientific Revolutions*: University of Chicago Press.

Letzter, R. 2017. 'Did The Wildfire Rabbit 'Rescuer' Doom A Litter of Babies?' Live Science, https://www.livescience.com/61134-leave-fire-rabbits-alone.html (Accessed February 28, 2018).

Levy, A. 2018. 'New AAUP Report Addresses the Assault on Science'. *Academe* 104(1): 4.

Lewis, S. and M. Maslin. 2015. 'Defining the Anthropocene'. *Nature* 519(7542):171–80.

Lorimer, J. 2015. *Wildlife in the Anthropocene: Conservation After Nature*. Minneapolis, MN: University of Minnesota Press.

Mathews, F. 2013. 'Wild Animals Are Starving, and It's Our Fault, so Should We Feed Them?' The Conversation, http://theconversation.com/wild-animals-are-starving-and-its-our-fault-so-should-we-feed-them-16803 (Accessed February 28, 2018).

McMahan, J. 2010. 'The Meat Eaters' The New York Times,
https://opinionator.blogs.nytimes.com/2010/09/19/the-meat-eaters/ (Accessed
April 11, 2019).

Moore, L. and M. Kosut. 2013. *Buzz: Urban Beekeeping and the Power of the Bee*: NYU
Press.

Morris, J.. 2017. Native Gardens Can Help Support Pollinators and Wildlife'. The Mercury
News, https://www.mercurynews.com/2017/06/01/native-gardens-can-help-
support-pollinators-and-wildlife/ (Accessed March 1, 2018)

Nading, A. 2014. *Mosquito Trails: Ecology, Health, and the Politics of Entanglement*.
Berkeley, CA: University of California Press.

Nixon, R. 2011. *Slow Violence and the Environmentalism of the Poor*. Cambridge, MA:
Harvard University Press.

Neimanis, A., C Åsberg, and J. Hedrén. 2015. 'Four Problems, Four Directions for
Environmental Humanities'. *Ethics & the Environment* 20(1):67–97.

Ogden, L. 2011. *Swamplife: People, Gators, and Mangroves Entangled in the Everglades*.
University of Minnesota Press.

Rigden, J, and R Stuewer. 2012. 'Anti-Science: It Comes from the Top'. *Physics In
Perspective* 14(4):389–391.

Robertson, M. 2017. 'Fact Check: Don't Expect Wild Animals Fleeing Fires to Show up in
Your Yard'. San Francisco Chronicle,
https://www.sfgate.com/bayarea/article/Wild-animals-fleeing-wildfire-on-your-
doorstep-12271373.php (Accessed February 28, 2018).

Sanders, C. 1999. *Understanding Dogs*. Philadelphia, PA: Temple University Press.

Sanders, C. and A Arluke. 1993. 'If Lions Could Speak: Investigating the Animal-Human
Relationship and the Perspectives of Nonhuman Others'. *The Sociological Quarterly*
34(3):377–90.

Scauzillo, S. 2017. 'Don't Leave Buckets of Water for Wildlife Fleeing Ventura, Los
Angeles Fires, Says US Forest Service'. Pasadena Star News,
http://www.pasadenastarnews.com/2017/12/08/dont-leave-buckets-of-water-
for-wildlife-fleeing-ventura-los-angeles-fires-says-u-s-forest-service/ (Accessed
February 28, 2018).

Seaton, B. 2013. 'Siding with the World: Reciprocal Expressions of Human and Nature in

an Impending Era of Loneliness'. *Emotion, Space and Society* 6:73–80.

Singer, P. 1975. *Animal Liberation: A New Ethics for our Treatment of Animals.* New York: Harper Collins.

Tsing, A. L. 2015. *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins.* Princeton, NJ: Princeton University Press.

Tuan, Y. F. 1984. *Dominance and Affection: The Making of Pets.* New Haven, CT: Yale University Press.

Weik von Mossner, A. 2013. 'Troubling Spaces: Ecological Risk, Narrative Framing, and Emotional Engagement in The Age of Stupid'. *Emotion, Space and Society* 6:108–16.

Tables

Table 1. Comments on ABC7's original rabbit rescue video coded 'yes' and 'no' for each category.

	Positive Response	**Negative Response**	**Sadness**	**Heroism**
Yes	492 (70%)	37 (5.3)	122 (17.6%)	77 (11%)
No	211 (30%)	666 (94.7%)	581 (82.6%)	626 (89%)
Total	703 (100%)	703 (100%)	703 (100%)	703 (100%)

Table 2. Comments on Emmy Rossum's 'water buckets' post coded for each category.

	Supportive	**Sadness**	**Dismissive**	**Skeptical**	**Action Taken**	**Ref. to Authority**
Yes	274 (54%)	246 (48.3%)	17 (3.3)	11 (2.1%)	8 (1.6%)	5 (1%)
No	235 (46%)	263 (51.7%)	492 (96.7%)	498 (97.9%)	501 (98.4%)	503 (99%)
Total	509 (100%)	509 (100%)	509 (100%)	509 (100%)	509 (100%)	509 (100%)