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#### Mental Health Impacts on Communities Affected by Wildfire

Wildfires are a destructive force, largely resulting from the effects of global climate change. In addition to the ecological annihilation these events inflict upon the planet, wildfires impact the emotional well-being of those who survive and fall victim to their destruction as well, in what experts refer to as 'ecological grief.' With the influx in wildfire occurrences across the United States and abroad, it is evident that these events are likely to occur more often in the future, which is why it is important to understand how human beings can be affected by wildfires and other large-scale climate disasters. The study of ecological grief is a growing field, however specific attention to the mental health impacts of wildfires and broader societal implications is somewhat lacking. Since there is a relatively smaller body of research regarding the emotional impacts of the exposure to the effects of wildfire globally, the focus of this paper will revolve around the topic, and will aim to explore how different communities across the world are affected by wildfires, attempting to answer the question, how do communities affected by wildfire cope with ecological loss and what kind of emotional toll is taken on them?

In this paper, I predict that communities affected by wildfire will experience elevated levels of grief and anxiety, along with the development of post-and pre-traumatic stress disorder, with grief for the landscape playing a role in this. Additionally, I believe that individuals and communities that support one another as opposed to those that stay isolated, are less likely to

experience severe instances of fire-related trauma due to the bonds they build with one another in the wake of these events.

### Background

Grief is an inherent human emotion which we often feel when we lose someone close to us that we deeply care for, like a partner, relative, or even a pet, which is why it can be difficult to understand a concept like ecological grief. Ashlee Cunsolo and Neville Ellis define ecological grief as "the grief felt in relation to experienced or anticipated ecological losses, including the loss of species, ecosystems and meaningful landscapes due to acute or chronic environmental change." (275). Additionally, they state that ecological grief is most prevalent in those who experience ecological loss at higher rates, including those who live and/or work within nature, and those who experience deep connections to natural landscapes (275). Ecological loss due to wildfire has increased alongside global temperatures.

According to NASA's Goddard Institute for Space Studies, Earth's average global temperature has increased roughly 1° Celsius since 1880, with two thirds of that warming occurring since 1975 ("World of Change"). Rising temperatures can directly be correlated with increased instances of wildfire, as climate change is a main driver for these events. Instances of wildfires are occurring globally. In the United States, heavily forested West Coast states are frequently affected. Australia, Indonesia, the Arctic, and Brazil's Amazon Rainforest have experienced tens of millions of acres of destruction by wildfire in the past year alone ("Global Wildfires"). The main causes of wildfire include lightning and human error ("Wildfire Causes"). Instances of wildfires have been increasing along with global temperatures, while wildfire season has been increasing at an average of 3 days per year since the 1970s and dramatically affecting those who come into their path (Westerling 5).

It has been suggested that many communities in the United States that are at high wildfire risk are home to majority disadvantaged populations, including the elderly, undocumented residents, the unemployed, and Native Americans (Masri et al. 16). Low-income residents additionally have limited access to resources to recover from wildfire events, which includes physical and mental healthcare, and resources to rebuild their homes. With instances of wildfires occurring at higher rates, it can be inferred that many more people will ultimately be affected in some way by a wildfire; this can be through direct and indirect loss, as the natural landscape is important to many. Therefore, it is important to continue the research that has been conducted, as ecological grief is on track to impact many communities in the future.

### **Effects on Global Communities**

Wildfires can devastate communities and destroy material possessions, but they also can bring people together. The ways in which people experience the emotional impacts of wildfires and ecological loss vary across the world, but in general there are both positive and negative lasting impacts of experiencing a major climate disaster. In Rebecca Solnit's *A Paradise Built in Hell*, she explores the ways communities work together to care for one another in the wake of disaster, and how community action and involvement is a powerful force in providing emotional support. It can be inferred that individualistic societies, such as those in the West, adapt to become more collectivist when faced with uncertainty. Solnit states, "horrible in itself, disaster is sometimes a door back into paradise, the paradise at least in which we are who we hope to be, do the work we desire..." (3). Although disasters like wildfire are indeed not welcomed, the immediate after effects upon affected communities provide a glimpse into how the world could benefit from stronger bonds within these groups, and on a larger scale.

There are numerous instances of Americans working together to help one another in the wake of wildfire tragedy. There are Facebook groups, community dinners, and support groups that have come to be as a response to ecological grief from wildfires. In Redwood Valley, California a support group for boys displaced by wildfire decided to share their emotions and experiences in a YouTube video to encourage other young people to accept and understand their feelings (Harrington). However it has been observed that occasionally in the United States, traditional individualistic ideals are adhered to, which can make it difficult to process the emotional tolls of climate-related events. One California wildfire survivor's reasoning for not participating in community group meetings following the fire was because of how small her community was. She stated "We all kind of know each other … I didn't want to do that." (Stern). For some Americans, embracing and acknowledging difficult emotions can be seen as a sign of weakness, shame, or embarrassment, as societal norms dictate they should. While research regarding ecological grief in the U.S. is vast, similarities and differences can be observed in the recorded and perceived emotional impacts of wildfire across the planet.

Considerable research has been conducted on the emotional impacts of wildfires in Australia, as fires have been an increasingly serious and persistent threat over time, devastating communities, threatening animal populations, and destroying the natural landscape. A study conducted after the devastation caused by the 'Black Saturday' bushfires in Australia in 2009, found that the affected residents were more resilient towards ecological grief due to their strong connection to the landscape and to the bush (Block et al. 65). This connection also resulted in lower instances of fire-related mental health effects like depression and PTSD, while a detachment from the natural landscape was shown to increase these impacts; the authors also emphasized the impact the regrowth of the bush had on residents, as it gave them hope for the

future (64). By forging deep connections with the natural landscape, and with the panet, it is evident that hope and resiliency can emerge from even the most devastating circumstances.

While Western countries appear to be some of the most studied and researched in regards to wildfire, it is important to recognize that people in underserved countries, namely the Global South, are experiencing ecological loss at higher rates and that their physical and emotional well-being are dually affected. It is evident that wildfires can have both immediate and long-term impacts on communities. In order to fully understand this, we need to understand what the impacts of ecological grief look like.

### **Psychological Implications**

Ecological grief can manifest itself in a variety of psychological affectations. Instances of the development of a mental health issue have been shown to increase for those within communities who experienced wildfire, with recent studies focusing specifically on this topic. After studying the mental health impacts of survivors of Canada's Fort McMurray wildfire, Moosavi et al. concluded that there is evidence to support a positive correlation between wildfire exposure and the development of a mental health issue (11). The most common mental health afflictions developed in response to wildfire exposure are post or pre traumatic stress disorder (PTSD), generalized anxiety disorder (GAD), major depressive disorder (MDD), and substance abuse (2). These are also among the most widely researched mental illnesses, due to the vast amounts of people living with them around the world, however other emotions resulting from ecological grief and anxiety are not as widely studied.

Recognizing the impact of natural disasters on human populations is important in demonstrating the repercussions of unethical or exploitative practices that humans inflict upon the Earth. Eisenman et al. delved into ecological grief looking at the feeling of 'solastalgia'

through a psychological lens, as opposed to mental health disorders PTSD, GAD, and MDD, which are already heavily researched topics in this field. Solastalgia is defined as a "loss of solace," and refers to "the distress caused by environmental change." (603). The feeling of solastalgia, as stated by the authors, can indicate to community leaders and policy makers that there is inherent emotional and psychological value to cultivating and maintaining Earth's natural landscape (608). Experiencing grief for the natural world in the aftermath of a climate-related disaster is prevalent among affected communities, which is why understanding how mental health is impacted is important in helping others cope, and in understanding ecological grief and anxiety. Feeling solace within the natural environment, or one's home or community, can create an overall sense of belonging. The destruction of these meaningful and comfortable places can affect the ways in which people interact with the natural world; either with complacency, with action, or the spaces in between. The ways in which people cope with ecological trauma can range from substance abuse and other instances of physical harm, to taking positive steps toward action in order to better cope with changing natural landscapes.

### **Community Support**

Finding ways to engage and acknowledge difficult emotions that result from climate related disasters can allow survivors to heal and to take action against the very disasters that caused them to experience ecological grief or anxiety. Additionally, the impact of community engagement and participation in response to wildfires has shown to positively affect how survivors cope with vast ecological destruction. For example, community resources like the mental health resource website *MySonomaStrong.com* and the app *Sonoma Rises* were created in response to wildfires in Northern California as a way to provide mental health services to community members and foster an overall sense of belonging for those impacted (Simon). In

general, social support during and after wildfires has been shown to positively aid in coping with fire-related trauma.

Research focused on women and young people has concluded that community support is beneficial in reducing long-term emotional symptoms such as PTSD, GAD, and MDD within wildfire affected regions (Sprague et al.; Felix and Afifi). In researching the role of community support in the wake of wildfire, Felix and Afifi noted that women were generally more active in maintaining networks of support than men, concluding that women "have more social support available and accessible during times of need." (167). In a similar survey conducted with youth survivors, Sprague et al. determined female participants were more willing to express their emotions regarding the effects of wildfire, which suggests lower stress levels among this demographic after a wildfire (444). They also determined that overall, participants with stronger perceived senses and of emotional support from their families and communities were less likely to endure intense levels of stress (445). It is clear from these results that while a strong sense of community in the wake of disaster can reduce symptoms of ecological grief and anxiety, other approaches are necessary in affecting larger wildfire victim demographics globally, as mental healthcare does not employ a one-size-fits-all approach.

#### **Recommendations for Motivating Change**

By implementing Indigenous knowledge and using grief as a way to motivate change, we can observe how under-utilized approaches can effectively aid in coping with ecological grief. Creating or reinforcing cultural ties to the Earth can help us to move forward after disaster. Quoting Indigenous elders, Indigenous scholar Daniel Wildcat writes,"if we see the natural world as full of relatives, not resources, good things will happen." (139). Implementing this way of thinking could create positive outcomes for wildfire survivors, since as human beings we are

more accustomed to dealing with grief as it pertains to our corporeal realm. In addition to putting climate grief into a more digestible reality, the mindset of personifying the natural world puts into perspective the harm we are inflicting on it, thus spurring ecological change and conservation. The thought of inhabiting virtually inhospitable regions of the Earth where burning 'relatives' is an annual occurrence may not be motivating to some, however, and it is important that we look for varied sources of motivation for action.

For wildfire survivors, taking action against the ecological destruction they incurred could present itself in different forms including organizing community spaces, participating in a research study, or lobbying for local or national climate change policies. In current literature, hope is described as an emotion or action that is emphasized and recommended, as a way to motivate people to take action, such as those mentioned above. In her book *Hope Matters*, author Elin Kelsey claims that being exposed to positive instances of climate successes, such as the repopulation of species or a reduction in greenhouse gas emissions, can show us that the planet is headed in a hopeful direction, which can inspire hope within individuals (160). However, news media platforms do not always portray these positive trends. While it is important to maintain a positive, even hopeful, outlook on how we as individuals can affect the impacts of climate change on our communities, it is also important to look towards more realistic, or relatable, means of motivation. Derrick Jensen's Beyond Hope vehemently rejects hope as a motivating emotion and instead underscores the importance of love as a guiding factor in effecting change. Fostering a love of the Earth's natural landscape and resources can also aid in reducing ecological grief, though ignoring or suppressing our human tendencies to hope may render love less effective, which is why both love and hope are necessary emotions to utilize as motivation to act, especially for those physically and emotionally affected by wildfires globally.

# Conclusion

In addition to fostering and maintaining healthy coping skills, staying active within one's community can reduce symptoms of ecological grief and anxiety. Wildfires are not singular or rare occurrences, and instances of their presence across the Earth are increasing alongside global temperatures. Because of this, a "business as usual" mindset regarding climate change and wildfires that does not challenge the way we are interacting with and exploiting Earth's resources, is not sustainable for humanity's future. It is important to teach and instill resilience within wildfire-afflicted communities in order to mitigate the physical and emotional effects that these events cause to occur. Building strong and successful communities around and within disaster-stricken areas also sets a precedent for future communities that will inevitably have to deal with, in the dry seasons to come. Acknowledging ecological grief and the ways in which it affects communities globally, challenges the notion of the normalization or acceptance of wildfires and other climate-related effects, as well as the idea that there is little we can do to help reduce these impacts. This research illustrates the importance of strong communities and support systems in reducing mental health impacts on wildfire survivors. While not all climate-related events or disasters are the same, it is important to understand where the successes lie so we can understand and try to help those affected by the myriad other climate impacts.

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