Fire has been used as a management tool in grassland ecosystems since the beginning of time. Inhabitants, including the first indigenous peoples have used both natural and man-made fires to manage the land. Fire in the Northern Great Plains, historically ran on a frequent, low-intensity regime (McGranahan and Wonkka 2007), which in current times has changed to high-intensity, infrequent fires, that often have woody encroachment by highly flammable *Juniperus* species (Fuhlendorf et al. 1996, Margolis, E.Q. 2014). Prior to early Euro- American settlement and vast land use changes, indigenous peoples used fire to promote new growth of grasses, remove old growth including standing dead litter, manage game, and for other cultural uses (Courtwright, J. 2007, Anderson, R.C. 2006, Pyne, S.J)*.* However, post settlement, the use of fire on the landscape was diminished. As settlement began the land was broken up from grasslands and turned into farmland, outlining fire as a destructive and dangerous element to livelihoods. The grasslands became filled with anti-fire settlers, introducing a social-ecological perspective to grassland management.

With fire historically occurring in the Northern Great Plains, native plants once abundant due to the disturbance fire brought have significantly declined. Allowing woody and invasive encroachment. Kentucky bluegrass (Scientific name) had increased its distribution into >85% of the rangelands located in the Northern Great Plains (Toledo et al. 2014a). This significant increase of Kentucky Bluegrass is due to the lack of disturbance including fire and grazing that promotes homogeneity (Toledo et al. 2014a). Unfortunately, Kentucky bluegrass can only produce good forage quality at the beginning of the season but is overall unable to provide nutritional value as the season continues, proving to not provide any beneficial qualities to landowners (Toledo et al. 2014a). Reintroducing fire into grassland management may be the only way to combat the significant increase of Kentucky bluegrass (Kral et al. 2018). Except, with most landowners choosing forage quality and production over environmental concerns reintroducing fire back on to the landscape proves to be challenging (Roche et al. 2015). Reintroducing fire back onto the landscape would increase forage quality and production as well as alleviate environmental concerns, but many see the constraint of fire as other landowners and community members that have social or attitude barriers, casting a negative light onto fire.

These barriers are split into two categories of social and practical barriers. Social barriers include societal norms and attitudes, liability, and education or knowledge. Whereas practical barriers include labor, equipment, money, or government restrictions. The physical barriers are often easier to combat, where social barriers are harder as landowners and community members must change their attitudes on fire and prescribed fire. Oftentimes there are social norms that a group will indirectly designate as right or wrong (Hechter and Opp 2001). These social norms can restrict a landowner from burning, as they do not want to upset others, even if they feel as if it is the right thing to do with their land. Many studies have listed liability as being the largest barrier for landowners, including risk of an escaped fire, causing harm to neighbors, community and their own personal property and safety (Morton et al. 2010, Bendel et al. 2020, Elmore et al. 2009, Schohr et al. 2020, Harr et al. 2014, Polo et al. 2020). Although, there is little evidence of prescribed fires going wrong when proper training and knowledge is cited, as well as many states having. Knowledge and education are limited in anti-fire communities as they do not see it fit, limiting access for landowners who believe it is right for their land.

Practical barriers are often the easier barriers to overcome as they have more clear-cut solutions. Labor tends to be a barrier as having people that are knowledgeable and trained to conduct fire is not always common. As burners are often legally required to have a certain number of people to be able to conduct a fire, to reduce any risks. States vary on what qualifications and personnel needs are. North Dakota does not require any trainings or qualifications but states “At least four [people] must be present when the prairie is burned” (North Dakota Century Code § 18-07-06). Without support from neighbors or the community this oftentimes can be challenging. Which leads into another barrier having the correct equipment, most landowners will not have all of the equipment needed to conduct a safe burn, including mowers, tractors, and plows to create fire breaks, or torches, hand tools, water units, and multiple vehicles to conduct the burn, and fire resistant personal protective equipment and hand-held radios to keep the personnel safe. When having to purchase this equipment it often becomes a barrier because it can turn into a costly management practice. Although fire is the cheapest long-term woody plant control method (Kreuter et al. 2008, Toledo et al. 2012, Symstad et al. 2017). Except, this knowledge is unknown to most landowners as the start-up costs often prove to be a barrier when they already have other control methods. Participants in Harr et al. study outlined that fire did not directly benefit ranching operations as it benefitted wildlife, and oftentimes destroyed food for their cattle. When a management method does not directly benefit them now it is hard for landowners to justify a new management method.

As of the publication of this piece North Dakota does not contain a Prescribed Fire Association to help conduct training, education, and burns. Limiting possibilities for future burns on private lands. This study aims to outline why landowners are hesitant to burn on their land and their overall feelings of fire, to hopefully work with landowners and community members to use prescribed fire as a management tool, restoring the grasslands.

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