


Perspective

# Taking a Tabula Rasa Approach to Wildfire Governance: A Thought Experiment and Call for Papers and an Open Dialogue on the Topical Issue of Fire

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**Abstract:** This perspective serves as a preface to the Topical Issue of Fire and presents an opportunity, framed within the classic approach of a thought experiment, to discuss how a new wildfire governance framework may be created from the ground up, if it were unencumbered by any existing construct, or experiences. It is not specific to any one country or fire regime; rather, it is intended merely to stimulate a wider conversation about where we are at collectively, and where we may want to move to in the future with our policies, organization, science, management, technology; or any of the myriad components that comprise the greater discipline of wildland fire science and management. The authors suggest that loosening the shackles of reality may allow for innovative discussion and the generation of transformative ideas to help ecosystems and communities better coexist with fire. We invite perspectives to submit to this Topical Issue on all aspects of wildfire governance, including reviews and perspectives. We also welcome perspectives on how to adapt wildfire governance in the face of exceptional events such as pandemics, earthquakes, famines, and war.

**Keywords:** governance; tabula rasa; wildfire; response; thought experiment; management; regimes; ecology

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To introduce this Topical Issue and the open call for papers, we have structured this preface as a thought experiment. In order to frame this thought experiment, we follow the premise defined by Locke [1], that is commonly referred to as a tabula rasa approach [2,3]. In this scenario, we find modern humanity faced with the incredible discovery of an uninhabited continent-sized landmass. The continent is temperate, habitable, and contains multiple biomes and landforms. A survey finds that naturally occurring wildfire is present across a spectrum of fire regimes, but that no aboriginal or historical anthropogenic use of fire had previously occurred. The sociopolitical ramifications of such a modern discovery are obviously vast, and so most of the factors that *could* be discussed must be set aside to allow our intended conversation to be narrowed down to the subject of discussion, that is, how to arrange a new wildfire governance where there has been no prior anthropogenic intervention.

In this “Call for Papers and An Open Dialogue” we invite three general types of papers. Firstly, we invite any reviews or syntheses relating to contemporary wildland fire management and discussions for how or whether such management forms should change. Secondly, we invite any form of review or perspectives on how to adapt wildfire governance in the face of exceptional events such as pandemics, earthquakes, famines, and war. Thirdly, we invite authors to respond to how wildfire management could be conducted when considering a tabula rasa approach.

Expanding on this third focus, we offer a simple set of sideboards, and invite innovative responses considering the potential approaches that humanity may choose to engage with this new landmass. First, it is decided that humanity wishes to actively occupy the new continent. We leave matters of choosing the political governance that oversees it to you, as part of the experiment, if at all. Second, we will operate under the strict caveat that before the land is settled, a coordinated plan will be agreed upon for how the landscape and the fire within it will be managed. The land and the fire within is a clean slate, or as Locke stated, a “white paper, void of all characters, without any ideas” [1]. If not a perfect example of a *tabula rasa*, perhaps this scenario offers the best chance to consider it as one.

The cross-section of humanity who engages with this unknown continent would, of course, have reference to the fire histories from the existing world. At their disposal, they would have a plethora of wildfire-related research papers, lessons learned, textbooks on fire ecology and community response, reams of governmental management plans, surveys, models and designs. Yet, they get to choose their own path for what to do with this information, if they decide to use it at all. They are not beholden to any of it. This is their chance to start over with something new. The advantage they have here is the ability to work with both a clean slate and the hindsight of others’ experiences.

Now then; let us enter into their planning discussions as a participant-observer. We, the editors of this Topical Collection, offer just a few thoughts to start the thought experiment dialogue. The first question is perhaps the most obvious one, so we will start there. Of what exists elsewhere, what should be applied here? This starts with the acknowledgment that fire will be present either from the natural fire or the fire humans bring. Fire ecology literature instructs that fire possesses a role in nearly every ecosystem. They would know that fire came naturally at different intervals and intensities and expressed itself as definable regimes. They know that fires lit by humans could have a dramatic effect on these fire regimes, and that the removal of human fires could be equally influential.

They would also know that fires ignited by humans within the natural patterns of the regimes could have a complementary effect to free burning wildfire. Fires lit outside of these rhythms could serve as a disruption. The species that exist on the landscape now are able to be influenced by the transport of humans, animals, and seeds. How would they be protected? Furthermore, is it worth the effort to try?

The next question is the simple converse. What aspects of wildfire, as it exists elsewhere, would be most important to discard? One discussion would surely be the paradigm of wildfire control aligned to the intentions and values of society. They will explore this question through the lens of knowing how policies of fire suppression and fire use played out in multiple countries. It is tempting to believe they will intrinsically accept that wildfire will burn where available fuels and conditions allow it, and adjust their plans to enable coexistence accordingly [4–6]. In that event, they may design communities that mimic how plants and animals have adapted to coexist with fire [4] and perhaps will not ignore it for economic reasons or assume that someone will simply put the fire out. Nor may they choose to ignore inevitable ‘downstream’ cascading consequences such as soil transportation within denuded waterways following storms in burned areas impacting human values such as communities placed downstream [7]. Perhaps they will rethink what their values are, how much importance to place on them, or simply where to place them. They may be more contemplative about sending humans to fight wildfires when the humans sent are the only tangible values at risk. Perhaps some among them would argue to avoid relocating their values as archipelagos within a sea of future fire.

A related question that they may also consider is whether similar fire regimes exist in the ‘old world’ where they may expect similar responses to fire or fire management in the new continent. Such, ‘new-to-them’ conditions observed in the new continent may be similar to contemporary or historical conditions that have been observed in the ‘old world’ [7]. As such, they would have the choice to use or disregard this existing data and observations when making their choices, but more importantly, they would have these data from the ‘old world’ outlining what they may expect given their decision [7].

Having sketched out some options for what they may choose to keep or discard, some deeper questions arise. What is the necessary level of investment in and engagement with wildfire in this scenario? Lessons from the past show that, over time, wildfires drew in more and more investment from local and national resources. The newly arrived may be wary of repeating this mistake. They may wish to seek only to entangle themselves with wildfire at the level that meets their societal goals (undefined at this point, perhaps), and allows nature to meet its own goals unassailed. This would require deliberately retooling the juxtaposition found at the human-nature interface. It could be seen as a separation, a barrier, or a mutually beneficial welding. We may hope that they find some middle ground whereby fire is allowed to work its intentions and humans are unaffected, except perhaps by the occasional drift of smoke, or an amber sunset worthy of remark.

Without doubt, someone would be tasked with keeping an eye on the flames. What then would be the most appropriate governance? They would have to ask themselves the question of scale. At what scale do they wish to see wildfires be governed or at all? They could emulate countries that have either organized their fire responses under local organizations such as states or territories, or others who have chosen to nationalize the entire fire service. Some countries have an extremely complicated hybrid of local, state, and national responsibilities that operate in a patchwork fashion; even private contractors get in on the game. Deciding the complexity of their governance will reflect their desired level of entanglement with fire—as always, driven by the variances of local fire regimes. Is it an occasional worry, with an occasional response? Does it equate to the scale of an individual fire, or does it aggregate into a national level concern?

We will end this thought experiment at this stage. In your mind, return people to their homes and homelands in the world as it is known now. Return the existing governments to their places of institutional oversight. Before we go, however—a question to leave you with. If the discussion leads to general agreement that starting over with a clean slate would lead us back to the same place we are now, then, we can be satisfied in knowing that we currently have the optimum approach to managing wildland fires. If there is agreement, however, that a clean slate would produce a different direction, we then have to ask ourselves, are we taking those steps now? If not, why not? Institutions take on a life of their own and often, it becomes easy to overlook that its collective visions are encultured and indoctrinated. If a new path is needed, dare we reset the successional pathway of wildfire governance? We welcome and look forward to your reviews and perspectives in response to this introduction to the Topical Collection.

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