Abstract

Changing weather patterns and land uses have caused the prevalence and severity of wildfires to increase across the western United States, which has implications for the long-term habitability of the region. This research focuses on the western Pacific Northwest (here defined as northwestern Oregon and western Washington), which tends to be under-represented in fire-related scholarship due to the historically low fire occurrence in the region. Using a particularly severe wildfire event in 2020 as a framing device, this study aims to shed light on how agricultural production in the Pacific Northwest can remain resilient against smoke and wildfire dangers. To answer the research questions, "What resilience strategies have farmers applied to manage dangers from wildfire and smoke?" and "How can agricultural resilience to wildfire dangers be supported by actors outside the individual farm?" five semi-structured interviews with farmers across the region were carried out. The interview questions focused primarily on changes in farmers' fire preparations since 2020, their experiences getting support during and after the fire event, and their opinions on changes in fire policy.

The results of the interviews show that farmers in the region have begun to take wildfires more seriously since 2020, implementing changes that reduce fire risk on their properties and minimize the effects of crop loss. The respondents have also built their resilience capacities outside of a wildfire-specific context by engaging with community groups and prioritizing diverse production and self-sufficiency on their farms. However, involvement with the governing bodies responsible for broader wildfire policy is low, indicating the need for more engaged governance strategies. Further studies are needed to get a more holistic picture of the area's resilience capacities and to understand how the slow variables contributing to wildfire prevalence (regional climate and landscape change, opaque management practices) can be impacted by local actors.