

Assessing Missouri State Park Employee Perceptions of Vulnerability and Resilience to Extreme Weather Events

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Abstract : State parks and historic sites are vulnerable to extreme weather events which can affect visitor experiences, management priorities, and legislative requests for disaster relief funds. Recently, global attention has been focused on the perceptions of global warming and how the presence of extreme weather events might impact protected areas, both now and in the future. The effects of climate change are not equally distributed across the United States, leading to varied perceptions based on personal experience with extreme weather events. This study describes employee perceptions of vulnerability and resilience in Missouri State Parks & Historic Sites due to extreme weather events that occur across the state but grouped according to physiographic provinces. Using a four-point rating scale, perceptions of vulnerability and resilience were divided into high and low sub-groups, thus allowing researchers to construct a two by two typology of employee responses. Subsequently, this data was used to develop a three-point continuum of environmental concern (higher scores meant more concern). Employee scores were then compared against a statewide assessment which combined social, economic, infrastructural and environmental indicators of vulnerability and resilience. State park employees thought the system was less vulnerable and more resilient to climate change than data found in statewide assessment This result was also consistent in three out of five physiographic regions across Missouri. Implications suggest that Missouri state park should develop a climate change adaptation strategy for emergency preparedness.

Keywords : extreme weather events, resilience, state parks, vulnerability

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