

Archaeological Potential of the Grand Staircase-Escalante National Monument

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Background

Executive proclamation 9682 reduces the size of the Grand Staircase-Escalante National Monument (GSENM), removing protections for at least 2,000 known archaeological sites and an unknown number of undiscovered cultural properties. Because only 10% of the GSENM's 1.9 million acres has been inventoried by archaeologists, fully evaluating the potential consequences of these boundary reductions in the remaining 90%, or 1.71 million acres, requires the use of predictive modeling. Here we report the major findings of a comprehensive predictive modeling program undertaken by the University of Utah Archaeological Center. Methodological and analytical details are available from the authors or in a report issued to the Bureau of Land Management.



Acknowledgment: Thanks to Jerry Spangler (Colorado Plateau Archaeological Alliance), Matt Zwiefel (Bureau of Land Management) and the UU Center for High Performance Computing.



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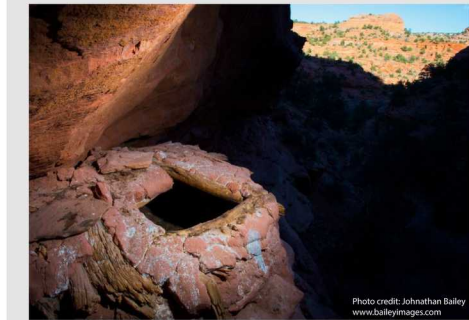


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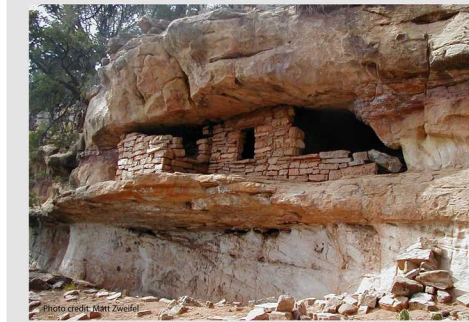


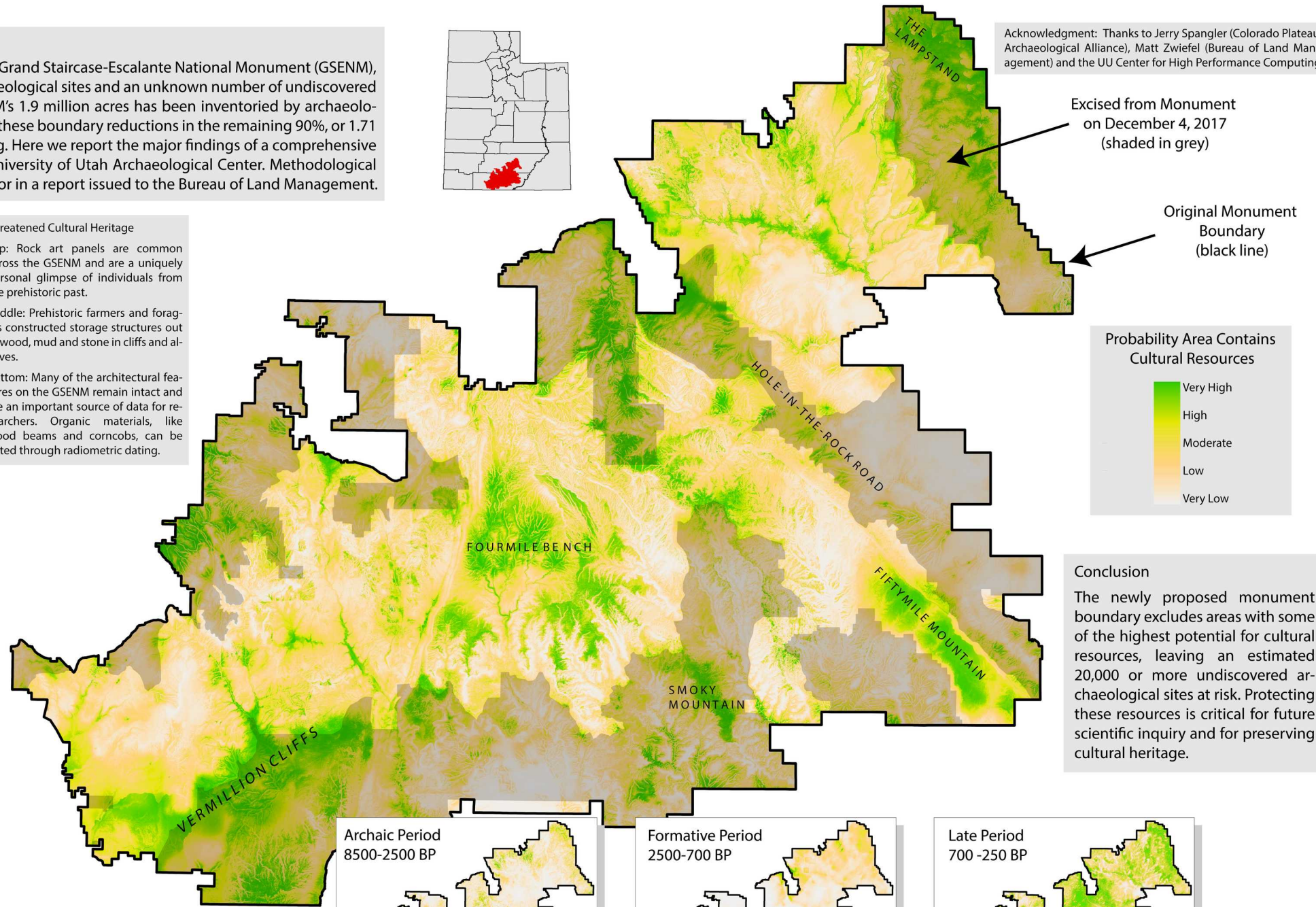
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Threatened Cultural Heritage

Top: Rock art panels are common across the GSENM and are a uniquely personal glimpse of individuals from the prehistoric past.

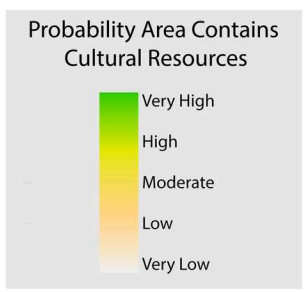
Middle: Prehistoric farmers and foragers constructed storage structures out of wood, mud and stone in cliffs and alcoves.

Bottom: Many of the architectural features on the GSENM remain intact and are an important source of data for researchers. Organic materials, like wood beams and corncobs, can be dated through radiometric dating.



Excised from Monument on December 4, 2017 (shaded in grey)

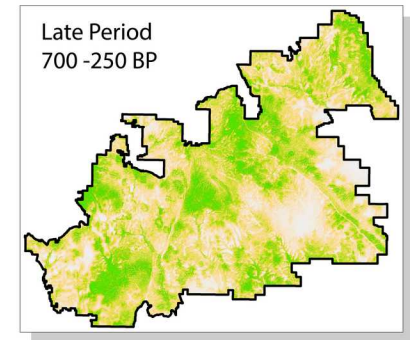
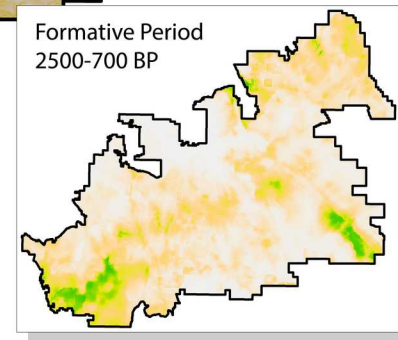
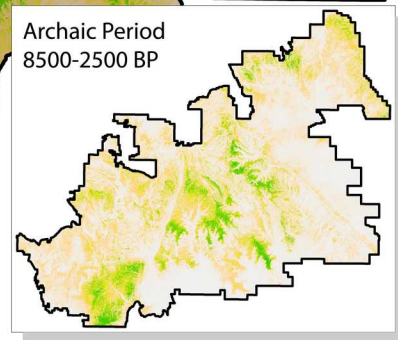
Original Monument Boundary (black line)



Conclusion
The newly proposed monument boundary excludes areas with some of the highest potential for cultural resources, leaving an estimated 20,000 or more undiscovered archaeological sites at risk. Protecting these resources is critical for future scientific inquiry and for preserving cultural heritage.

Snapshots Through Time

Our analysis reveals changes in prehistoric land use through time, including the 6000 year record of Archaic hunter-gatherers, the nearly 2000 year Formative Period dominated by maize agriculturalists, and the Late Period return to hunting and gathering in response to multidecadal droughts.



Relative Population Density (corrected cal. ¹⁴C SPD)

