Abstract

LINK TO PAPER
An Integrative Approach to Simulating Prescribed Fire in Northern Arizona
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Simulation of fire requires an extensive amount of data and can be accomplished best using GIS applications. This paper demonstrates the integrative procedure of using ArcGIS, ERDAS IMAGINE, GPS, and FARSITE to predict prescribed fire behavior on the Kaibab-Paiute reservation, a distinct landscape of sagebrush grasslands and juniper-topped mesas. ArcGIS was used to create a database incorporating all variables into a common spatial reference system and format for the FARSITE model. ArcGIS Spatial Analyst was then used to select optimal burn sites for simulation. Our predictions will be implemented in future interagency efforts towards vegetative restoration on the reservation.

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