

# Restoration of Southwestern Ponderosa Pine Forests: Implications and Opportunities for Wildlife

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**Abstract**—After a century of fire suppression, livestock grazing, and even-aged timber harvest practices, forest managers in the Southwest face an enormous challenge. Millions of acres of ponderosa pine forest are extremely susceptible to uncharacteristic, high intensity wildfires, the consequences of which were amply demonstrated by recent mega-fires in Arizona and New Mexico. Current condition of ponderosa pine forests are also atypically homogeneous in structure and composition, which results in reduced habitat biodiversity for wildlife. In response, land managers have begun planning and implementing extensive forest treatment projects along urban interfaces and in wildland areas. Although many of these projects are designed primarily to reduce the risk of high intensity wildfire, these treatments have considerable potential to improve wildlife habitat, by creating diversity at the stand and landscape level and increasing productivity in shrub and understory layers. While there is widespread agreement that restoration of Southwestern forests is needed, the location, scale, and approach of treatment prescriptions remain controversial, especially when addressing wildlife needs. We present a conceptual overview of wildlife responses to treatment-induced changes in ponderosa pine forest structure and summarize results from ongoing studies on the Mt. Trumbull restoration area in northern Arizona.

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