

ALTERED DISTURBANCE REGIMES: DEMISE OF FIRE IN THE EASTERN UNITED STATES

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A series of maps was generated to help alert and educate people to the pervasiveness of fire regime changes across the Eastern United States. Using geographic information systems, we assigned fire regimes to spatial vegetation databases to depict past and current conditions. Comparisons revealed substantial reductions in fire throughout the East. The most dramatic shifts took place in the former midwestern grasslands and across a broad swath of Southern and Central States, where pine and oak communities historically dominated. Land-use changes, e.g., agricultural and forest-type conversions, and 20th century fire suppression largely explain these shifts. Fire regime change was somewhat limited in northern climes (northern hardwood systems), in the mixed mesophytic region, and within the Mississippi Embayment. Unforeseen consequences of prolonged fire suppression are mounting while restoration opportunities are waning.

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