

Fire Regimes and Potential for Ecosystem Recovery After Plant Invasions

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Landscapes altered by plant invasions may be difficult to restore to pre-invasion conditions when ecosystem properties such as fire regimes have been altered. Plant invasions can alter fuel structure, which can affect fire behavior and ultimately the fire regime. If there is a positive feedback between the invader and the fire regime, then an invasive plant/fire regime cycle can become established. At progressive stages of this process, there is an exponential increase in the cost of successful restoration, and decrease in the probability that restoration efforts will be successful. Early detection and eradication systems for managing invasive plants should take into account the possible ways that invasions may alter fire regimes.

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