

The Fire in the East

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The fires in western forests captured the headlines and airwaves again last summer and the attention of the public. The press never seems to get it quite right, though, when they proclaim that thousands of acres were destroyed by wildfire. Foresters understand that these fires really represent disturbances of varying spatial extent and intensity. They might be more severe because of decades of fire suppression, abnormal fuel loads, and drought conditions. But these fires do not *destroy* forests, they temporarily rearrange the age class and volume distributions. Forests that once were 100 years old and perhaps held 36 Mbf/ac now are in the 0- to 10-year age class and have no merchantable volume, and as all foresters know, forests grow back. Even the catastrophic Yellowstone fires bear witness to the ecological resiliency of these lands. Most of the time, these lands will provide forest benefits in the future.

Another disturbance exists in the eastern United States that does not grab headlines, and yet permanently impacts the landscape. Forests do not grow back after development. Development fragments forests that remain reducing their ability to provide habitat, recreation, and timber. Private family ownerships continue to get smaller through parcelization and isolated in an increasingly fragmented landscape, which impairs their ability to provide the full range of benefits. The US Forest Service nationally estimates over 2,500 ac/day are lost to development (Stein et al. 2005). These “Forests on the Edge” (Stein et al. 2005) provide invaluable ecosystem services and are incredibly vulnerable to permanent conversion because they are owned by hundreds of thousands of private families and individuals. This “fire in the East” continues to “burn” and acres of forestland are permanently lost.

The trends are documented, but is this threat being taken seriously? The US Forest Service’s Fire Sciences laboratory in Missoula has over 100 staff and contractors who study physical fire processes, smoke dispersion, ecology, and management strategies. Dozens of US Forest Service staff study fire and its effects elsewhere in the West at the Fire Modeling Institute, the Rocky Mountain Center, and the Pacific Wildland Fire Sciences Laboratory. In 2009, the federal interagency Joint Fire Sciences Program will make \$8–10 million available for contract research on subjects such as regional haze—ozone and secondary aerosol formation, smoke dispersion from low intensity fires, and lifecycle fuels.

What about research and development to address the “fire in the East”? The US Forest Service’s social science agenda is largely devoted to recreation, nontimber forest products, urban forests, and community development.

The US Forest Service’s Forest Inventory and Analysis (FIA) program (the “nation’s forest census”), has well over 500 people devoted to providing information to assess America’s forests. Compare this to the single staff person within the FIA who runs the National Woodland Owner Survey (NWOS). The process of monitoring the number of private owners and their attitudes and behaviors could help us to understand and extinguish the “eastern fire” because collectively private, nonindustrial owners are responsible for half of the nation’s forests.

What is wrong with this picture? Don’t we have existing programs such as Forest Stewardship, Farm Bill cost sharing subsidies, and Tree Farm to inspire private woodland owners to take care of their land? These are effective with a small subset of owners; however, serious private forest loss, parcelization, and fragmentation continue to spread throughout much of the East. The NWOS estimates that after decades of cost sharing and other forms of inducement, as few as 4% of family woodland owners have a management plan, and only 14% consult a forester before the sale of timber (Butler 2008). At the rate that cost-shared stewardship plans are being adopted by private woodland owners, it would take 144 years for all north-eastern and Lake States owners to have one. And even in the unlikely circumstance that they did, NWOS documents that ownerships change hands every 26 years. It is a moving target of owners, a downward spiral of ownership sizes, and an overall erosion and permanent loss of private forestland. We are trying to fight the “eastern fire” with quaint agriculturally oriented incentives from the 1950s that are proving ineffective for the 21st century’s soaring real estate values, increasing property taxes and development, and a new generation of owners interested in privacy and contemplative values. In many places it is simply no longer enough for woodland owners to practice good forestry and have land pay its way. It is as futile as trying to fight western fires with only pulaskis and Indian pumps.

In the 21st century as our eastern forests disappear, we need to better understand how to effectively reach woodland owners with conservation messages like the sale or donation of easements to permanently protect land from development. In times of decreasing public budgets, can these messages be better conveyed through peer-to-peer networks? Indeed, might messages conveyed from owners to peers be deemed more credible or objective (and even cost-effective)? What role might the Internet play in effectively reaching woodland owners with a conservation message, especially those who live far from their woods? Would we reach more and different landowner segments if we expanded our outlook and collaborated with nontraditional nature or recreation-based groups? In light of the importance of ecosystem services that depend on functional forested landscapes, how can private owners be inspired to look beyond their own properties when making decisions about their land’s future? How could owners of small woodlands play an effective role in carbon sequestration or the production of woody biomass? Are these questions and the applied policies that may result at least as

important as research on crown fire models and smoke dispersion?

It is time to treat the permanent loss of private family forest in the East as seriously as the fires in the West. Invaluable ecosystem services are at stake. To continue applying outdated and ineffective programs is irresponsible. There are new potential approaches that need study, development, and preliminary application. This issue is a matter of leadership and priorities. That glow in

the eastern horizon is not the sun rising, but the “burning” of thousands of wooded acres, representing the permanent loss of forest to development.

Literature Cited

- BUTLER, B. J. 2008. *Family forest owners of the United States, 2006*. US For. Serv. Gen. Tech. Rep. NRS-27, Northern Res. Stn., Newtown Square, PA. 73 p.
- STEIN, S.M., R.E. MCROBERTS, R.J. ALIG, M.D. NELSON, D.M. THEOBALD, M. ELEY, M.

DECHTER, AND M. CARR. 2005. *Forests on the edge: Housing development on America's private forests*. US For. Serv., Pacific Northwestern Res. Stn., Portland, OR. 16 p.

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