ZONATIONAL PRESCRIBED FIRE USE REPORT



Technical Bulletin 04-20

Prepared by the Coalition of Prescribed Fire Councils, Inc.

This report is a collaborative effort of the National Association of State Foresters and the Coalition of Prescribed Fire Councils.



The mission of the National Association of State Foresters is to represent state and territorial forester interests by influencing forest policy and leading efforts to promote healthy and sustainable trees and forests.



The mission of the Coalition of Prescribed Fire Councils is to promote the appropriate use of prescribed fire for enhancing public safety, managing resources, and sustaining environment quality.

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Acknowledgements:

Special appreciation is given to all 50 state forestry agencies for providing the prescribed fire use intelligence; without their participation this report would not be possible. Thanks to the Jones Center at Ichauway for its continued support and particularly to my colleagues Jean Brock for GIS support, Lisa Giencke for data analysis, graphics, and editorial support, and Jessica McCorvey for report layout.

For a copy of this report, visit www.prescribedfire.net

Executive Summary

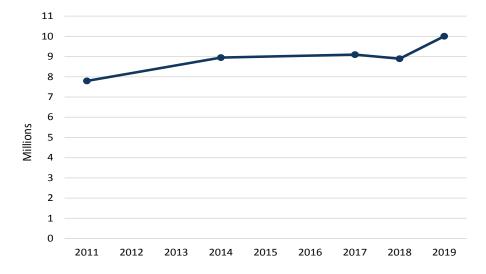
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The National Association of State Foresters (NASF) and the Coalition of Prescribed Fire Councils (CPFC) worked collaboratively to produce the 2020 National Prescribed Fire Use Report. Since 2011, the two organizations have partnered to prepare triennial reports (in 2012, 2015, and 2018) on prescribed fire activity, state-level programs, and barriers to prescribed fire implementation. These reports remain the only fire surveys that assimilate state forestry agencies' fire intelligence for use among the prescribed fire community.

In January 2019, NASF and CPFC decided that collecting data every third year was not providing a clear picture of prescribed fire use across the United States. Many variables, particularly weather, influence prescribed fire activity on an annual basis, in much the same way they effect wildfire activity, and cannot be detected when data is collected on a three-year cycle.

Additionally, the groups elected to discontinue collecting prescribed fire data for burns performed on agricultural lands. Nationwide, agricultural burning is treated differently from forestry/rangeland burning in that it is less likely to be regulated or tracked. The fluctuations in agricultural burn acres reported across survey years were in part responsible for the 12% decrease in national prescribed fire use from 2011 to 2017, as was reported in 2018. However, using only forestry/rangeland acres, which represent about 80% of the total reported acres treated with prescribed fire in the U.S., there would have been an increase in prescribed fire use in all survey years compared to 2011.

For the first time, this year's National Prescribed Fire Use Report includes data on annual forestry/rangeland acres treated with prescribed fire. According to state forestry agencies, 8,540,401 acres were treated with prescribed fire in 2018. In 2019, 10,003,541 acres were treated – an increase of 28% compared to 2011. **Importantly, 2019** was the first year the number of forestry/rangeland acres treated with prescribed fire in the U.S. exceeded 10 million.



National Prescribed Burning Trend

Figure 1. National forestry/rangeland acres treated with prescribed fire across survey years.

Regionally, the Northeast burned 247,306 acres in 2018 and 365,306 in 2019, a decrease of 7.1% from 2011 to 2019. The Southeast burned 6,349,875 acres in 2018 and 5,933,022 in 2019, an 8% decrease from 2011 to 2019. The West burned 1,943,220 acres in 2018 and 3,705,213 in 2019, which represents a 268% increase from 2011 to 2019. In the Northeast, 50% of states reported an increase in burned acres in 2019 compared to their historical average, while 38% of states were up in the Southeast, and 59% were up in the West.

Considered together, these are encouraging trends. In future surveys, NASF and CPFC will collect and report data on forestry/rangeland acres (and exclude agricultural acreage) annually, as opposed to every three years. With these improvements to the survey's methodology, subsequent reports will more accurately reflect annual variability in prescribed fire use. It will also be interesting in future reports to see the effects of COVID-19 on prescribed fire use in 2020, and, over the long-term, if the West becomes the national leader in prescribed fire use.

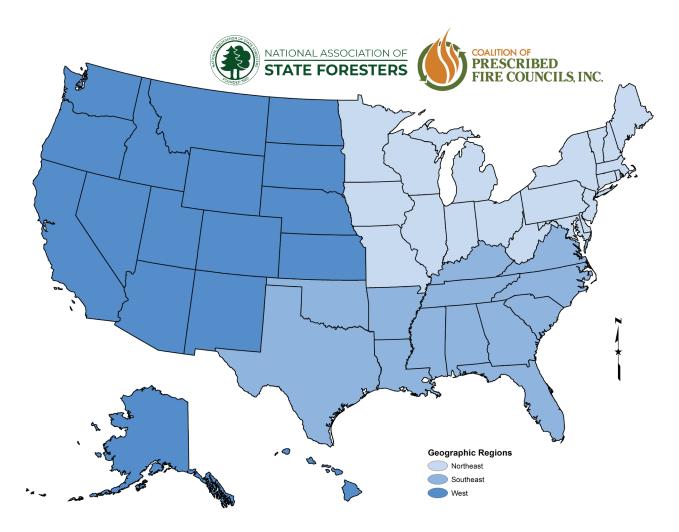


Figure 2. Geographic Regions. Note: The Northeast region is equivalent to NASF's Northeast-Midwest Region; the Southeast is equivalent to NASF's South Region.

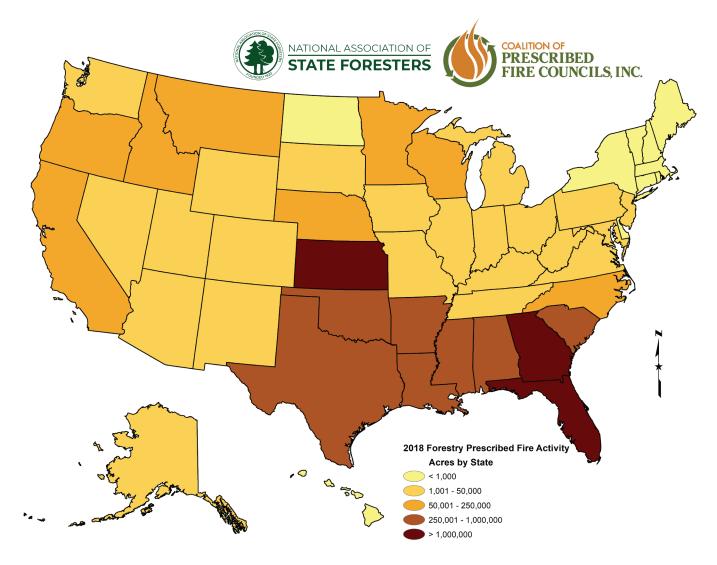


Figure 3. 2018 acreage of prescribed fire use for forestry/rangeland objectives by state. Coarse acreage classes were created using a histogram that determined the most significant breaking points in acres reported.

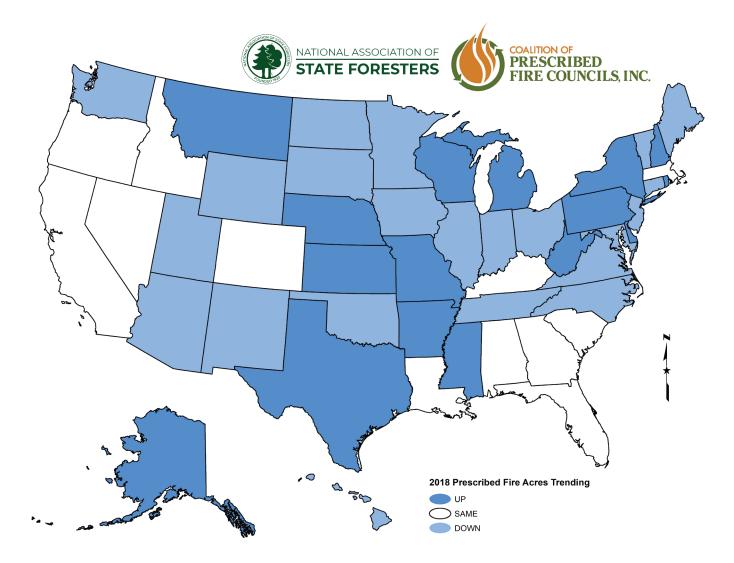


Figure 4. 2018 prescribed fire acre trend compared to the calculated average across survey years. "Up" represents a >10% increase in acres reported, "Same" represents 2018 acres that fall within ±10% of the previous survey's average, and "Down" represents >10% reduction of acres reported.

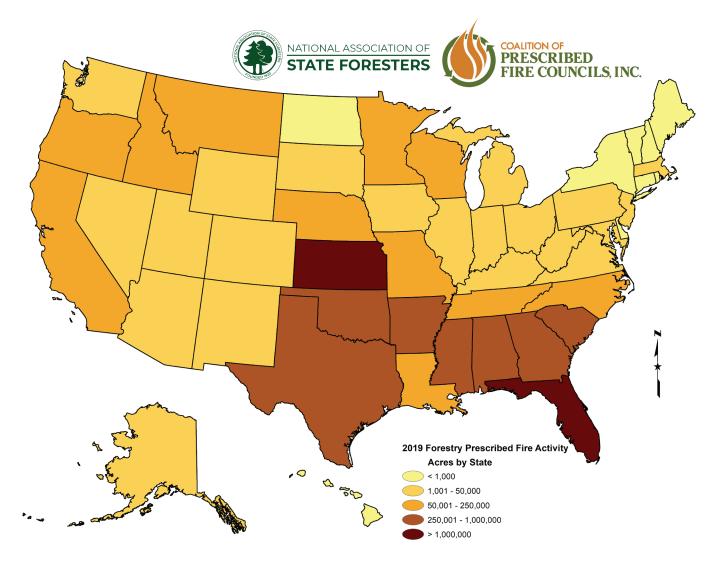


Figure 5. 2019 acreage of prescribed fire use for forestry/rangeland objectives by state. Coarse acreage classes were created using a histogram that determined the most significant breaking points in acres reported.

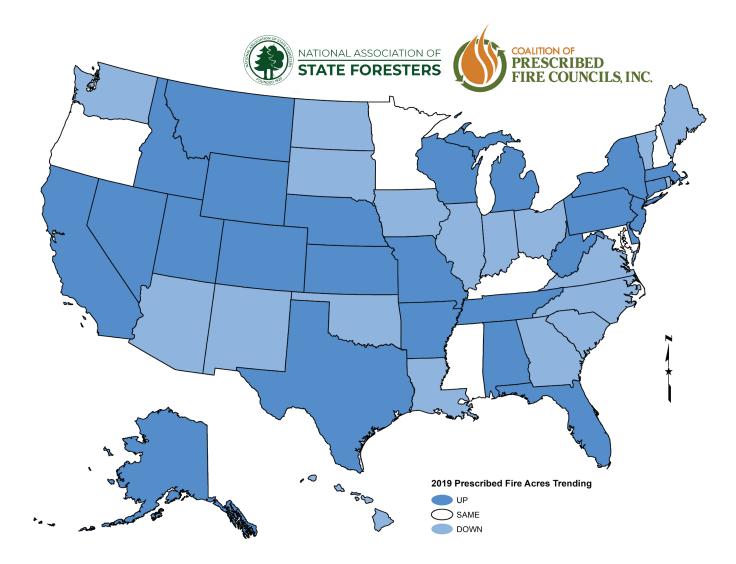
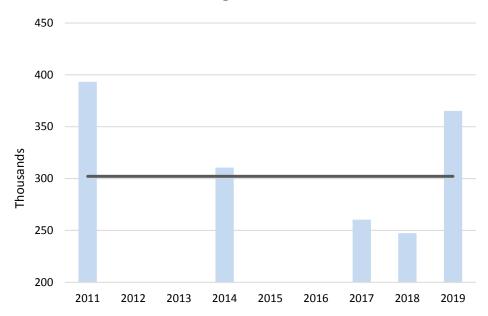


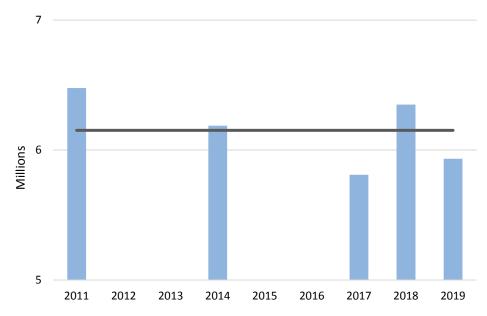
Figure 6. 2019 prescribed fire acre trend compared to the calculated average across survey years. "Up" represents a >10% increase in acres reported, "Same" represents 2019 acres that fall within ±10% of the previous survey's average, and "Down" represents >10% reduction of acres reported.



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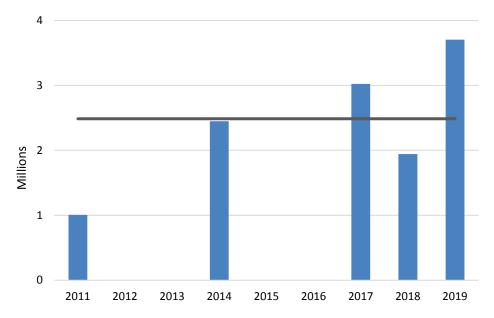
Northeast Prescribed Burning Trend

Figure 7. Northeastern forestry/rangeland acres treated with prescribed fire across survey years. The horizontal line represents the overall annual regional average of 302,158 acres.



Southeast Prescribed Burning Trend

Figure 8. Southeastern forestry/rangeland acres treated with prescribed fire across survey years. The horizontal line represents the overall annual regional average of 6,151,426 acres.



West Prescribed Burning Trend

Figure 9. Western forestry/rangeland acres treated with prescribed fire across survey years. The horizontal line represents the overall annual regional average of 2,487,207 acres.