

USFS Making Biochar to Create a Healthier Forest

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Forest Management helps reduce wildfire risk and maintain healthy, natural growth. A process that can create valuable products, like lumber, but also leave tons of unwanted waste. To solve this growing problem, the USDA Forest Service and Air Burners teamed up to develop the CharBoss through a CRADA agreement with the USFS. A technologically-driven solution to convert that waste into biochar. This valuable carbon-rich biochar restores soil and improves agricultural land. After a successful launch in 2020, the team went to work to add even more fuel efficiency and biochar production capacity. The upgraded CharBoss made its demo debut at the University of Idaho Experimental Forest in January 2023 and turned forest-thinning slash piles into 'black gold' biochar.

Debbie Page-Dumroese, a researcher with the USDA Forest Service Rocky Mountain Research Station, is a leading expert in biochar and shared her excitement about the technological developments she helped to develop and patent. "The ability to process woody residues on-site reduces open burning or the need to transport materials off-site, so there is less smoke and air pollution. Even better, we can create this terrific product that can be used to restore damaged soil." Jim Archuleta, a Forest Service regional biomass coordinator, who helped pioneer the innovation of CharBoss, echoed the enthusiasm, "Making biochar production part and parcel of normal Forest Service activities is the best way to make the seismic changes needed to help adapt to our changing climate."

See the CharBoss in action at one of our demonstration workshops across the western United States and Pacific Northwest and learn more about the revolutionary technology behind CharBoss [here](#).

