

DEADWOOD MANAGEMENT AND FOREST HEALTH, PRINCE WILLIAM FOREST NATIONAL PARK, VIRGINIA, USA

Daria Maslyukova, Adam Coates, and Mark Ford

Deadwood, noted as the sum of down-and-dead woody material and standing-and-dead stems, is an integral component of forest health. Deadwood may serve as an important contributor to wildfire hazard estimation in many forest systems, particularly as future climate models predict increased precipitation and drought intensities. Deadwood is critical to carbon storage and nitrogen cycling as these processes may vary according to deadwood size. Additionally, deadwood structural variability has been found to positively affect species richness in bees, salamanders, and birds. However, in the Mid-Atlantic Piedmont of the Eastern United States, there are no accessible tools to estimate deadwood of long unmanaged, secondary growth forests to help inform management goals and priorities. Management entities, such as the National Park Service, seek to understand deadwood dynamics in the Eastern United States more comprehensively to better inform visitors and guide management actions. Using modified Brown's transects, deadwood was inventoried at 270 plots at Prince William Forest Park near Stafford, VA in the greater Washington, DC metropolitan area in summer 2023. In this presentation, we discuss our preliminary results, including how deadwood varied as a result of aspect, elevation, physiographic province, and forest cover type.

Daria Maslyukova, Department of Forest Resources and Environmental Conservation, Virginia Tech, Blacksburg, VA 24061, USA

Adam Coates, Department of Forest Resources and Environmental Conservation, Virginia Tech, Blacksburg, VA 24061, USA

Mark Ford, USGS Virginia Cooperative Fish and Wildlife Research Unit, Blacksburg, VA 24061, USA