A simple test fire exercise for fire behaviour training

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Abstract

Three advanced fire behaviour courses were held in New Zealand during 1992-93. We experimented with the idea of using small outdoor test fires (1.2 x 2.4 m) to help reinforce some of the principles and concepts being described in the classroom (e.g. fire development from point versus line ignition, influence of slope steepness, documentation of fuels, weather and topography in relation to quantified fire behaviour, meaning of certain fire behaviour characteristics). The fuel beds used consisted of forest floor material collected more or less *in situ* from beneath nearby radiata pine plantations and stored under cover for at least a month. Three test fires were undertaken simultaneously: point-source ignition at 0° slope, line-source ignition at 0° slope, and line source ignition at 10° slope. Course participants found the test fire exercises an invaluable element of the courses. For fire behaviour training purposes, the present methodology is an acceptable alternative to conducting field-scale test fires which are often difficult, if not impossible, to carry out in most course situations.