

Success in fire suppression depends on the ability to be able to make a reliable estimate of fire behaviour under different burning conditions. This process begins with a basic understanding of the principles of combustion. We know fire behaves exactly how it is supposed to based on the conditions the fire is burning in. A knowledge of fuel types, an understanding of weather observations and how they apply to our fire environment, and an appreciation of how fire reacts to different landscapes (topography) is a good start to your success in predicting fire behaviour.

Fortunately in the fire behaviour world, we have access to a number of tools and guides to assist us in fire behaviour predictions. These aids, combined with our local knowledge and fire experience, we can begin to understand how a fire will burn, and where the fire will burn at any given time.

Does this mean all our predictions are going to be accurate? Just because a fire knows exactly where it is going to burn and how it will burn, doesn't mean we can predict each and every scenario precisely. It just means when we can, by using these aids and our own knowledge, make estimates to assist us in operational decisions to suppress fires in the safest manner possible. Getting everyone home safely at the end of the day is priority. Making judgments on fire behaviour is one way of ensuring firefighters work safely out on the fire line. Or in some cases where fire behaviour is too intense, then we can advise firefighters not to go out on the fireline . In this case operations can use alternate methods of suppression.

