

## Topic 8 Fuel risks Bins, fences, firewood

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### Justin Leonard

The placement of our wheelie bins in the landscape is just one of those obvious ones that, for many, they're diligent and they will have a particular routine about where the wheelie bins get parked during the fire season, while others just simply don't register that as a significant fuel load. They do burn out quite prolifically, and they are enough in themselves, if parked under a window or against a combustible facade, to be the reason why a house is lost.

### Justin Leonard

Fences play a key role and they come in many shapes and sizes. One of the worst offenders is brushwood fencing. It's hard to find pictures of brushwood fences in post-bushfire surveys because they've all burnt to completion. Here's the leftover steel frame from the brushwood fence that presented a particular risk to the brick house in the distance, and an acute risk also to the asbestos-clad house which had eight active-bodied adults defending it. And they saved it but only just, after extensive damage: losing windows, having a roof fire and a subfloor fire, all to contend with concurrently simply from the brushwood-fence fire.

Timber fences are a particular issue as well. We've done various experiments on timber fences, and what that actually revealed was that the typical distances that timber fences are built, in terms of where we're building houses as minimum setbacks from boundaries like 0.9m is about as close that you can build a house from a boundary without having particular measures like fire-rated walls. And, that's actually the perfect distance so that when, and if, the fence falls over as a flaming fence, it'll strike about the centre of your window and break it, even if that's a toughened glass or BAL-40 window. That's something that isn't actually addressed in building regulations at all, but it is a very prevalent way that houses are lost.

### Justin Leonard

House-to-house spread is another ubiquitous form of consequential fire, so the typical separations we see between neighbouring houses, or houses and sheds on the same property, or houses and sheds on neighbouring properties, when they're significantly less than 12m, say around the 6m range or less, then there is a higher chance that one house can burn its neighbour down.

Now the things you have to do to actually resolve a house-to-house spread are things like very tall steel fences, elimination of fuel loads between those two houses, which simply add to the problem, and quite fire-resisting construction on both houses, considering the windows, the eaves, and the fascia materials, is really the types of efforts you need. So, it's a really challenging mutual-risk problem that many face, and ideally having good separation is a virtue. However, when you don't, you're really in it together in a mutual risk scenario. And I guess, in a way, it's a very important neighbourly conversation to have when you share a mutual risk like this. And I guess another way to address it is to simply be as diligent as the neighbour that you share the risk with to make both properties as bushfire resistant as you can, so that you don't face anywhere near as much prospect of one house burning its neighbour down.

## **Justin Leonard**

The places we store our timber is an obvious one, and I guess the question is: is it okay during the winter, when we might use it for wood heating, but how diligent are we about the complete removal of those fuel loads during the fire event itself? And, of course, in a fairly built-up environment, we've seen wood piles built against fences that are sufficient to take out a neighbouring property, built at that normal setback of 900mm from a boundary. And that can be with a non-combustible fence or with a combustible fence in place.