Why Plant Flammability is Important

During a bushfire, the type, amount, and arrangement of vegetation is critically important for the survival of your house. The fuel for bushfires is the main danger factor that people can control. Hazard reduction activities such as clearing and fuel reduction burning, aim to lower the vegetation hazard to a safe level. Because some plants have a higher resistance to burning than others, we can use low flammability plants for added protection in addition to normal maintenance and hazard reduction activities.

There are two basic factors to be considered in determining a plant’s flammability: the first is how readily its parts burn and the second is how violently the burning takes place. All parts of many growing plants influence the burning of the whole plant. "Flammability" is not an absolute term. For example, a seed or a fruit is a vegetable; the form of the whole of the growing plant influences the burning of the whole plant. "Flammability" is the degree of importance that fire plays in determining the burning behavior of the plant. This value may vary from very low to high. Among the two factors, the flammability of the seed or fruit is critically important for the survival of your house. The fuel for bushfires can be used to slow the travel of a fire through the litter layer and fire resistant shrubs can be used to separate the litter layer from the tree canopy. If the fuel layer is covered with a protective material, like a water spray, the fuel layer is not easily ignited.

The Role of Replacement Planting

Fire retardant plants can absorb more of the heat of the approaching bushfire without burning than more flammable plants. They can trap burning embers and sparks and reduce fire-spread speeds near your house. If your house is surrounded by fuel-rich combustible vegetation, it is critically important for the survival of your house. Some do so well they choke out the natives, like blackberries, or become a fire hazard, like gooseberry. Many environmental weeds were brought to Tasmania as ornamental or food plants and have found conditions to their liking. Many are particularly affected by pests and diseases and so have a head start over the local plants. Predicting whether a plant will become an environmental weed is not easy so its good practice to use native plants in gardens close to bushland. Known environmental weeds in Tasmania that have moderate or higher flammability should be avoided and are shown on the plant flammability list.

For further information consult your local DPIW or Council weed management officers. A useful pamphlet is "Garden Plants are Going Bush and Becoming Environmental Weeds" published by the Society for Growing Australian Native Plants.

Protecting Your Home

Replacement planting with low flammability plants is not sufficient protection on its own. People living on the urban fringe and in rural areas need to be aware of the risk of bushfire and prepare themselves and their homes for when the fire comes. The Tasmania Fire Service DVD and booklet "Bushfire - Prepare to Survive" provides good advice for householders on the urban fringe and rural areas who want to prepare themselves and their homes for bushfires. The DVD, booklet and other fire safety advice is available from any Tasmania Fire Service office.

Fire resisting garden plants for the urban fringe and rural areas
Fire resisting garden plants for the urban fringe and rural areas

Introduction
All vegetation will burn in a bushfire and pose a hazard to people and their homes. However, not all vegetation has the same flammability and there is great potential for poisoning in bushfire prone areas to reduce their fire hazard by changing the plants in their gardens.

Flammability Groups
In the following list E denotes an exotic plant, TN a plant native to Tasmania, AN a plant native to mainland Australia and X a known environmentally weed.

High Flammability
These plants have been shown to be highly flammable and should not be planted or allowed to remain inside your house’s Building Protection Zone. They should also be avoided in the Fuel Modified Zone. Move these plants away from your house and replace them with less flammable plants.

Moderate Flammability
These plants should be avoided in the Building Protection Zone. They should not be allowed to dominate your garden and should be well maintained, being especially careful to remove dead material before it accumulates.

Low Flammability
These plants are acceptable in the Building Protection Zone and will be valuable in the Building Protection Zone and will be valuable