Australian Native Plants for Fire Resistance and Garden Design

Jo O'Connell, 2018

Jo O'Connell, Australian Native Plants

- I founded Australian Native Plants Nursery in the early 1990s.
- The Growing Grounds/Nursery is in Casitas Springs, between Ojai Ventura in Ventura County.
- My background is in Zoo horticulture, habitat design, re-vegetation projects, and the cut flower industry.
- My 35 years' experience is in plants from dry & subtropical, arid and Mediterranean areas of Australia.
- Email address: jo@australianplants.com
- Phone number: 805-890-2617
- Website: www.australianplants.com
- We are Open by Appointment



The Thomas Fire 2017

- The Thomas Fire is the second largest wildfire in modern California history.
- It began on December 4, north of Santa Paula and within hours raged through the city of Ventura.
- It burned approximately 281,893 acres and was only contained at the end of January 2018.
- My house was burned on December 5, along with several structures that were part of the nursery.
- In parts, Thomas was a firestorm, powerful enough to create its own weather.
- It left the local terrain so completely blackened that fire experts described it as "moonscaped."



What I Learned from the Fire:

- Fire retardant plants absorb more heat of an approaching fire without burning.
- Fire retardant trees can trap embers and sparks and reduce wind speed near a house.
- Fire retardant groundcovers can slow the travel of a fire through their leaves.
- Smooth barked trees will not burn as readily as stringy or rough barked trees.
- Plants with high moisture or salt content and/or low oil content will take more to ignite.
- Plants with high moisture or salt content and/or low oil content will burn more slowly.



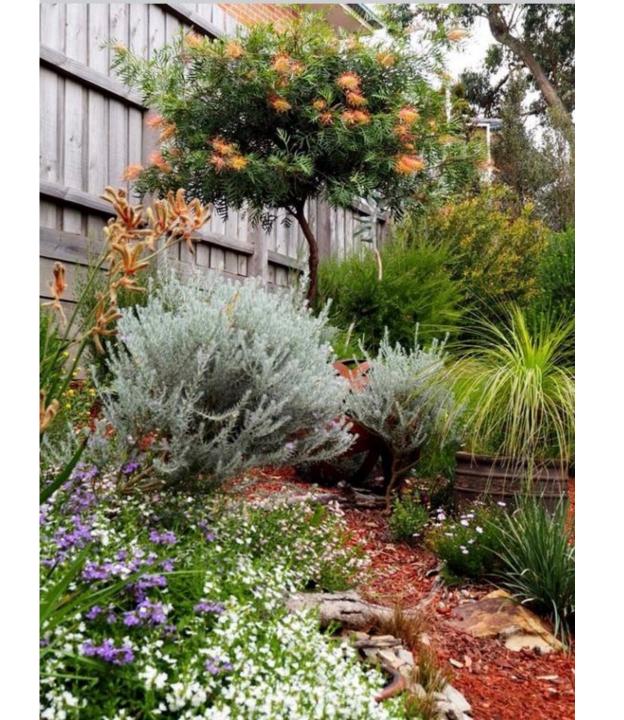
Maintenance Makes a Difference:

- Remove lower branches from trees.
- Don't allow branches to connect to the roof or part of any structures.
- Remove dry or dead material from around plants before fire season.
- Prune shrubs to keep foliage fresh and green.
- Keep plants around house and structures well irrigated.



Good Design Makes a Difference:

- A well watered hedge on the fire prone side of the house can:
 - a) reduce radiant heat b) prevent spread of fire to the house
- Replace lawns with inorganic mulches to help to slow the spread of fire, e.g. DG or gravel.
- Swales help to trap moisture.
- Plant fire retardant trees around structures as a shield.
- Test the fire resistance of plants by throwing a few leaves into a BBQ to see how they burn!



Features of Fire Retardant Plants:

- Broad and/or fleshy leaves
- High moisture content in leaves
- Smooth bark
- Low oil content: look through a leaf at the sun to sometimes see oil glands



Acacias that survived the Thomas Fire at my house:

- Acacia longifolia
- Acacia cyclops
- Acacia elata
- Acacia fimbriata
- Acacia floribunda
- Acacia viscidula













Hakeas that survived the Thomas Fire:

- Hakea salicifolia
- Hakea archaeoides
- Hakea trineura
- Hakea denticulosa









Other plants that survived the Thomas Fire at my house:

- Banksia integrifolia
- Brachychiton acerifolius
- Cassia brewsteri
- Cupaniopsis anarcardioides



More Plants that survived:

- Leptospermum petersonii
- Melaleuca armillaris
- Stenocarpus sinuatus
- Tristaniopsis laurina









Plants that Recovered:

- Gossypium sturtianum
- Calothamnus homalophyllus
- Eremophila decipiens
- Lepidozamia peroffskyana
- Lomandra longifolia
- Melaleuca hypericifolia



Going Forward:

- I will redesign my own house and garden in the following ways:
 - a) Plant Drought Hardy Rainforest b) DG and open space around the house
- I will design clients gardens with the following in mind:
 - a) Plant mostly low shrubs near house b) Plant screens 20+ feet from house if possible
- I will be growing more of the following plants for clients in fire prone areas:
 - a) Lomandras b) Grevilleas c) Hakeas d) Tristaniopsis e) Pittosporum f) Banksias

Thank You!

- We have Australian Native Plants for sale here!
- Our address is Nye Road, Casitas Springs, Ventura, 93022
- We are open by appointment.
- We do mail order!
- Website: www.australianplants.com
- Email: jo@australianplants.com
- Landline: 805-649-3362

