

# Fire in Avocado Groves 2007

## Management Considerations before, during and after adverse weather

Gary S. Bender  
Farm Advisor  
U.C. Cooperative Extension  
San Diego County

# Fire can be devastating



# All Groves: Preparation for the Fire

- Brush Clearing around the Grove
- Remove Eucalyptus and Pines
- Remove debris and wood from the grove

# Fire is Coming!

- Make sure you and your employees can get out quickly (vehicles for the employees).
- A second exit from the property?
- A few groves may be able to have a gas-powered generator to run a pump in the reservoir. This can be used for irrigation or fire-fighting

# Fire is Coming!

- Slow-moving fire, the wind is blowing away from the grove.
  1. Should have done brush clearing around the grove beforehand.
  2. Irrigation should be turned on at the side of the grove facing the fire.
  3. Crew with shovels stationed at the edge, if it is safe.

# After the Fire

- Looks Devastating!
- But, most of the trees can recover and be productive again
- If the burn was slow and there was a lot of heat coming up from a canyon, or there was a lot of wood in the grove, the Cambium layer may have been killed
- Tree will die within 3 months, if the cambium is dead

# How can you tell if the tree is dead?

- A small cut in the trunk may reveal almost no damage and the wood is still wet...a good sign!
- Or, the cut may reveal a deep burn
- Sometimes it is very difficult to tell....it is best to wait 3 months and let the tree start to re-grow
- Then you know where to prune

# Stumping?

- If you were going to stump anyway before the fire (for height control), you might go ahead and stump now.
- This will not make a cambium recover, you may find that the tree is really dead
- Stumps should be painted with white paint immediately



# First things first

- Repair the irrigation system
- Water for about 2 hours, make sure the soil is moist down to about 12" deep
- Erosion control
- Wait three months to prune

# Mixed damaged and live trees in the same irrigation block



# Young tree dead to the ground



# Examine the trunk



# Small cut reveals damage



# Cambium damaged on one side



# Most of the cambium is dead



# Fixing the Irrigation System

## Don McNamara Grove, Fallbrook





# Melted plastic pipe



# Barrancas should be strawed for erosion control



# Can ground cover protect a house?



# These guys are toast!

Too much heat from the canyon



# Wood Chip Mulch – not such a good idea in a fire



# Citrus/Avocado Nursery



# Half million pounds on the ground



# Stumping the wrong way





# Stumping correctly (more or less)



# Patience! Trees may grow back.



# Lack of Patience



# Growth at the top beginning – some pruning required



# Groves can stop fires



# Groves can slow down fires



# Melted aluminum ladders

## Steve Maddock, Maddock Nursery



# Fire is devastating, but





# Life goes on (birdhouse survived!)



# Farmers are gamblers, and they are resilient



# Thank you

- Gary Bender
- [gsbender@ucdavis.edu](mailto:gsbender@ucdavis.edu)
- (760) 752-4711
- 151 E. Carmel St.  
San Marcos CA 92078