

Bark Beetle Update

San Bernardino & San Jacinto Mtns.

Kevin Turner

CDF Riverside Unit

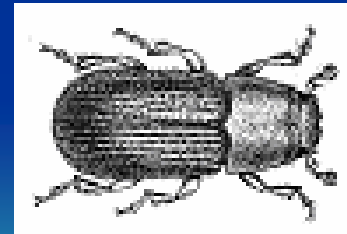
Glenn Barley

CDF San Bernardino Unit



Bring on the Drought

- 3 Years of Drought
 - Current drought began in 1998-99
 - 2000-2001 Began to see increased mortality
 - Driest year ever recorded 2001-2002
 - 2002-2003 Beetle populations explode



Where Are We at Today?

- 2003-04 below average precipitation
 - Significant decline in mortality summer 2004
 - Why?
- 2004-05 well above average precipitation
 - Mortality low until last couple of weeks
 - Large diameter trees being attacked
 - J.P. in San Jacintos succumbing to FHWB
 - RTB early in 2005....most not fatal



What Is Being Done?

- CDF
 - Consultation with NRCS-County on projects
 - Forest Practice oversight on non-fed lands
 - Fuel reduction on transportation corridors, safety zone, demonstration sites
 - Service forestry with private landowners
 - \$11 million Forest Health Enhancement Program
- USFS
 - BDF Fuels budget \$30 million in 2005
 - \$5 million in 2006...salaries, very little project \$
 - Projects completed include road corridors, community fuelbreaks and TSI, safety zones...

- Southern California Edison, SDG&E
 - Ordered by CPUC to remove trees threatening their facilities
 - Removed over 140,000 trees for \$139 million
- Natural Resources Conservation Service
 - Brings \$140 million to southern California (Rep. Lewis)
 - Removing much of the remaining trees on private land
 - Covering cost of removal on state highways and county roads
- Riverside, San Bernardino, San Diego Counties received fuel hazard mitigation grants (SFA, EAP, FEMA, \$20 million total)

An aerial photograph of a vast forested mountain range. The foreground shows a dense forest with some brown patches, indicating a fire or insect infestation. In the distance, a blue lake is visible, and the mountains continue under a clear sky.

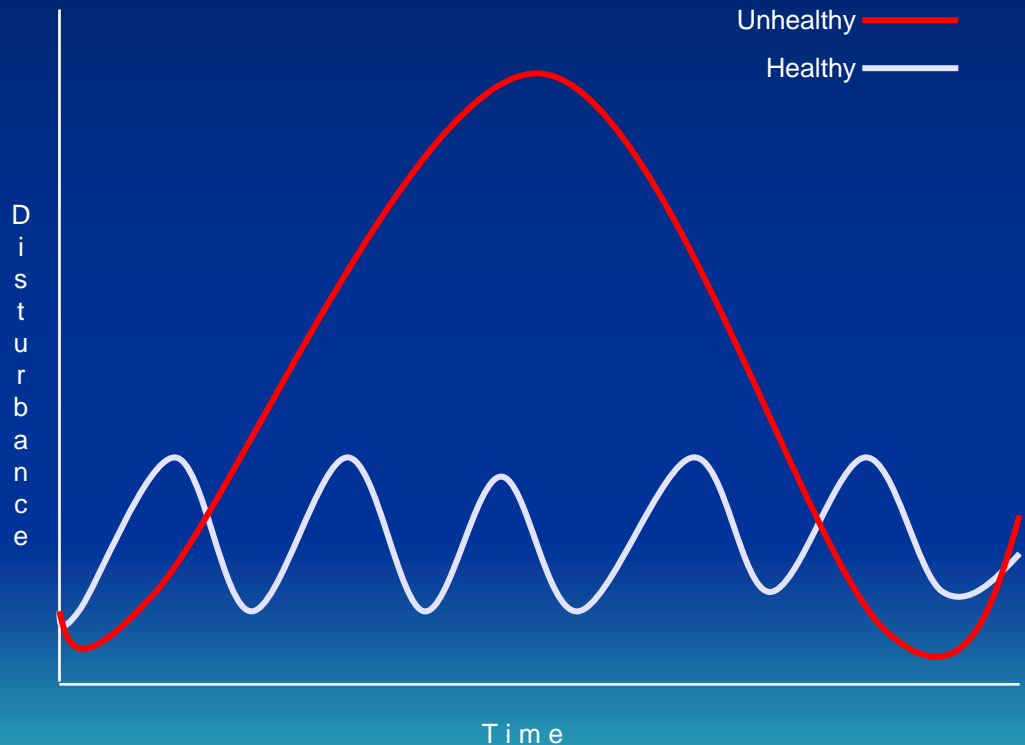
It's a Forest Health Problem, NOT a Bark Beetle Problem

- Need to create a forest resilient to disturbance (fire, insect, disease)
- How do you do that?

THIN IS IN!

What is a Healthy Forest?

- A forest that is resilient to disturbance



Aging & Overstocked Forest

- Ideal stocking 40-140 trees/acre
- Western portion of range up to 568 trees/acre
- Eastern portion of range up to 250+ trees/acre



Green Tree Thinning

- CDF/SBNFA Small Parcel Thinning
 - Cost share 75/25 with land owner
 - RPF provides professional management advice
 - Land owner responsible for work, RPF verifies work, SBNFA reimburses costs at completion
- NRCS/County Large Parcel Thinning
 - Large parcels
 - Follows MAST/FAST priority treatment areas



Current/Future Issues

- **Disease Issues**
 - Annosus Root Rot (Borax or not to Borax?)
- **Fuel Loading**
 - Do chips burn?
 - Nutrient balances?
- **Green Tree Thinning**
 - Will thinning increase beetle activity?
 - Brood material
 - Chips with terpenes





Wind Firmness



Snake Oil?

- Acecaps
- Worm Gold
- Organic Shield
- “Tree Rescue Solution” injected
- Tree Life Organic and Biodegradable
- Greengo
- Only Proven Treatments
 - Permethrin (Dragnet, Astro)
 - Carbaryl (Sevin)



ACECAPS

LOTS DONE

LOTS TO DO

