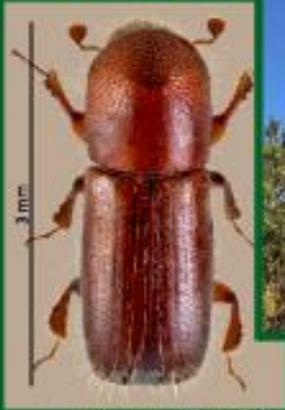


California Forest Pest Conditions



2020



A publication of the
California Forest Pest Council

California Forest Pest Conditions Report - 2020

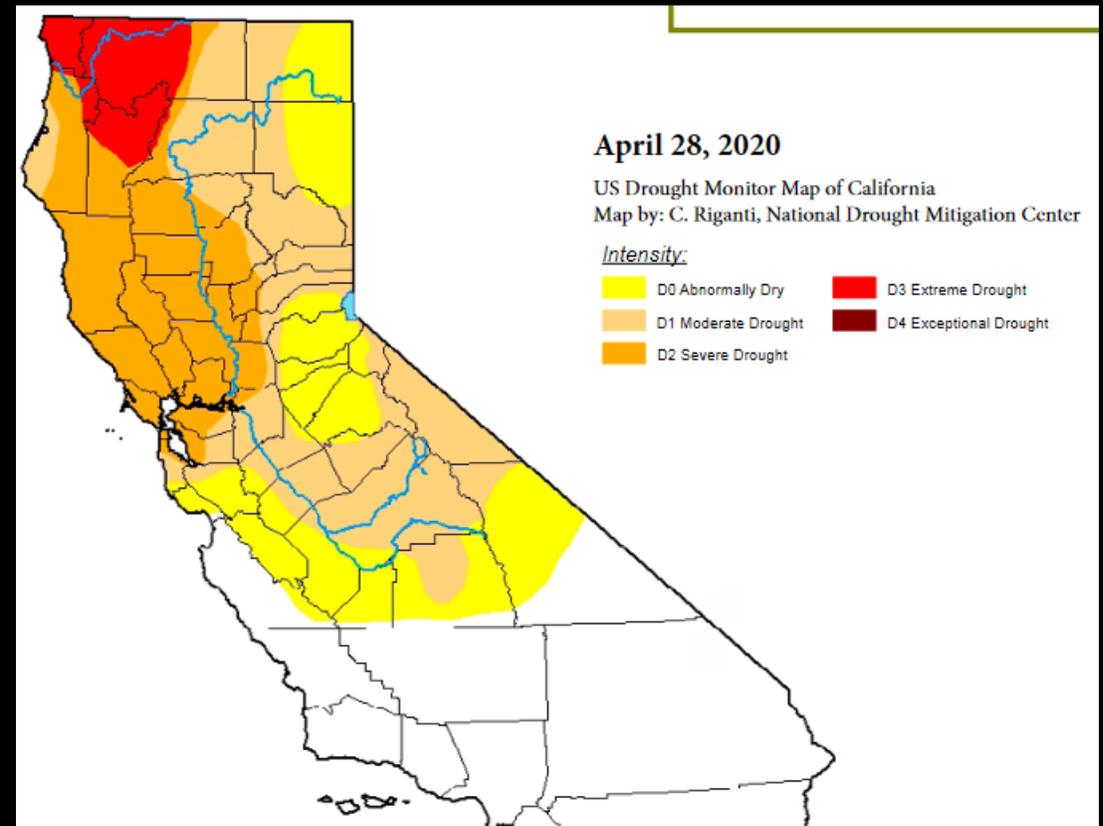
Tom Smith

Forest Entomology and Pathology
Program

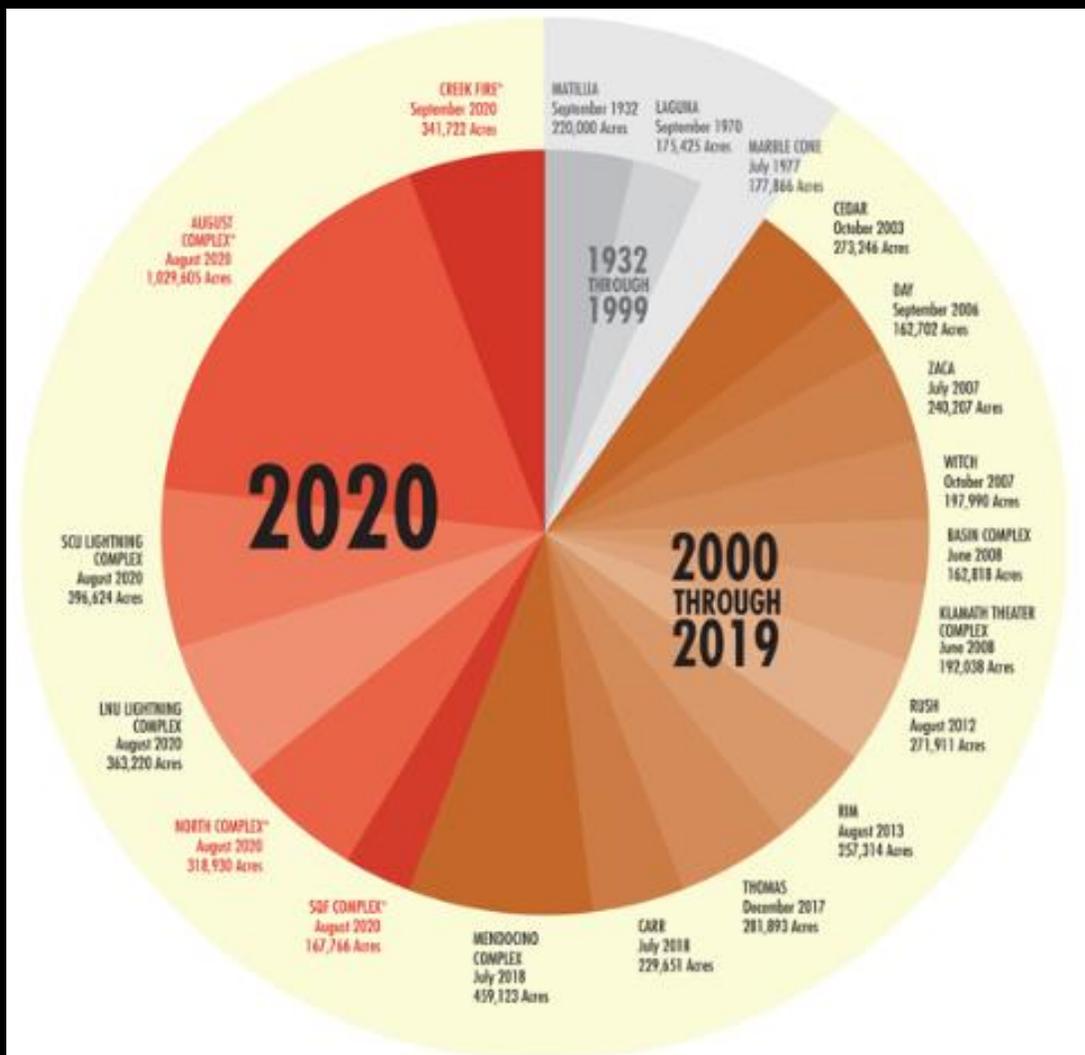
California Department of Forestry
and Fire Protection

Drought and Weather

- 2019/2020 water year was the 13th driest on record
- February was the driest ever recorded for the month
- September was the 2nd driest ever recorded
- August and September were the warmest on record (over 5 degrees above average for those months)



Wildfires



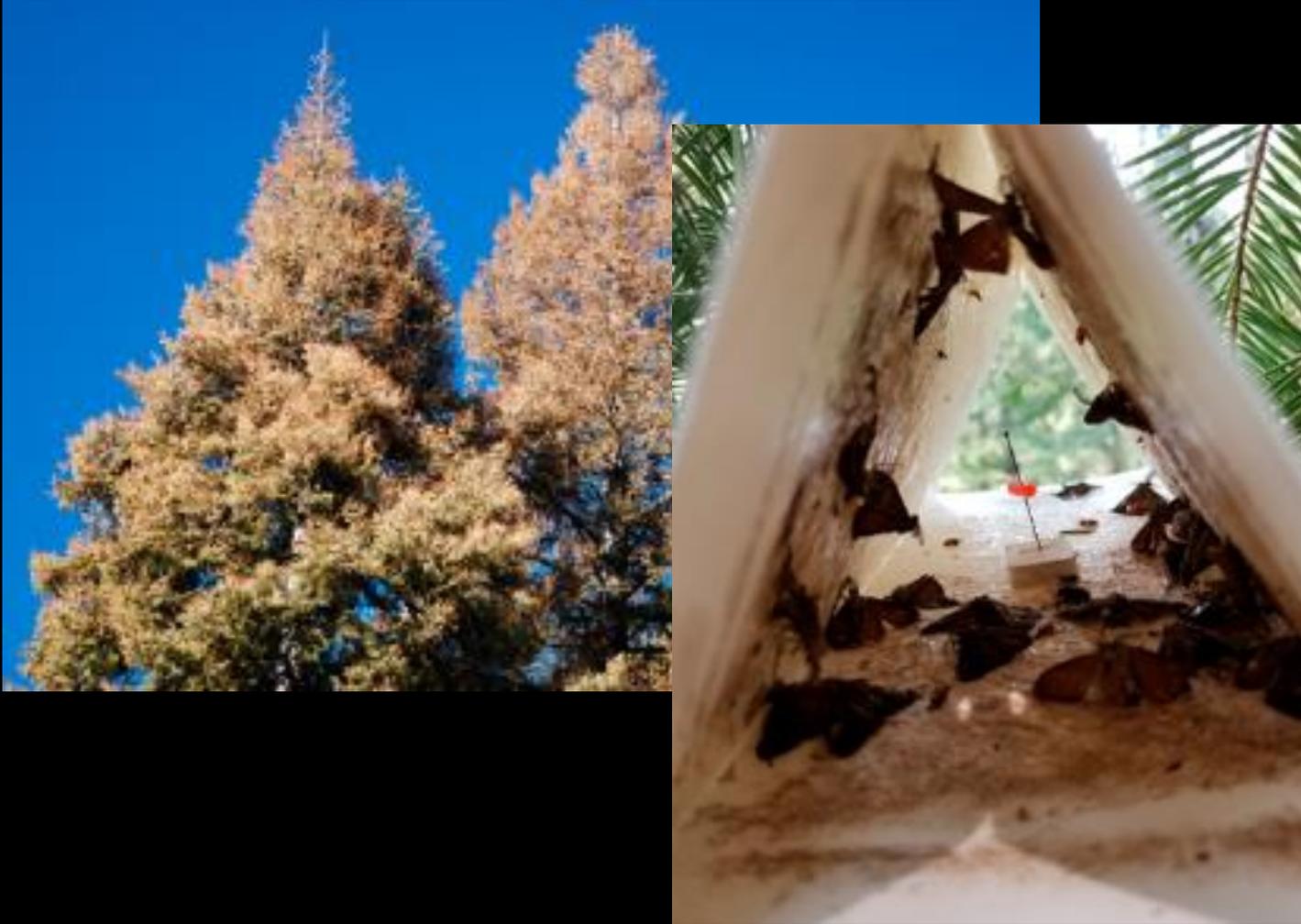
- Extensive wildfire damage was the most serious issue in 2020
- Wildfires burned 4.3 million acres (4% of the state's total land area) – more than 3 times the previous record burned in a single year
- 5 of the 6 largest wildfires in California history burned simultaneously
- August complex at more than 1 million acres was the largest in state history – more than double the previous record

Native Bark and Engraver Beetles

- Most bark and engraver beetle activity remained low in 2020 (2021 is looking like a year of increased activity, particularly in the central and northern Sierra Nevada and in foothill areas around the California)
- Some local activity of mountain pine beetle and Jeffrey pine beetle



Douglas Fir Tussock Moth



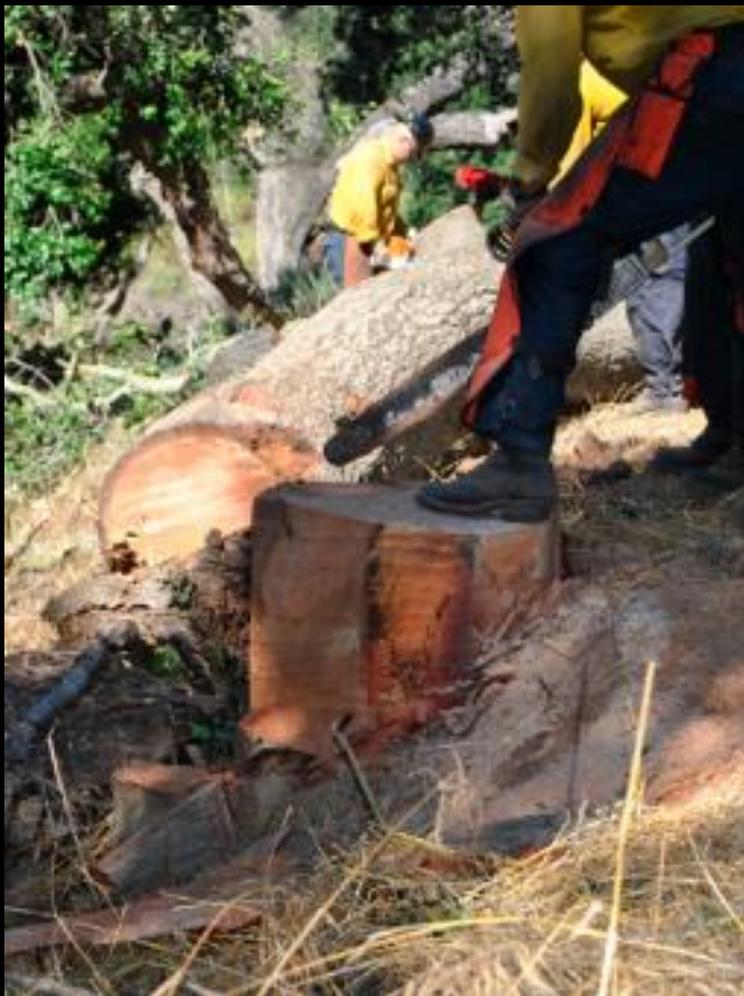
- High trap catches found in the southern Sierra Nevada with defoliation of white fir
- Very little trapping in 2020 due to Covid-19 so it is unknown if other areas also had problems with the defoliator

Balsam Woolly Adelgid

- Continued to cause decline and death of grand fir in Del Norte, Humboldt and Mendocino Counties



Goldspotted Oak Borer

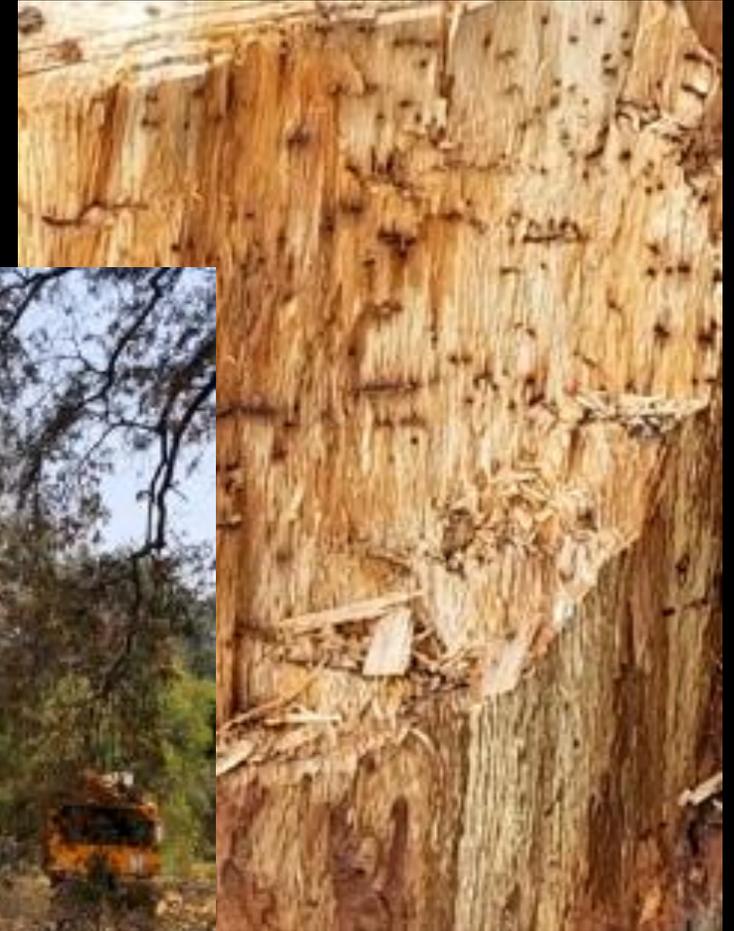


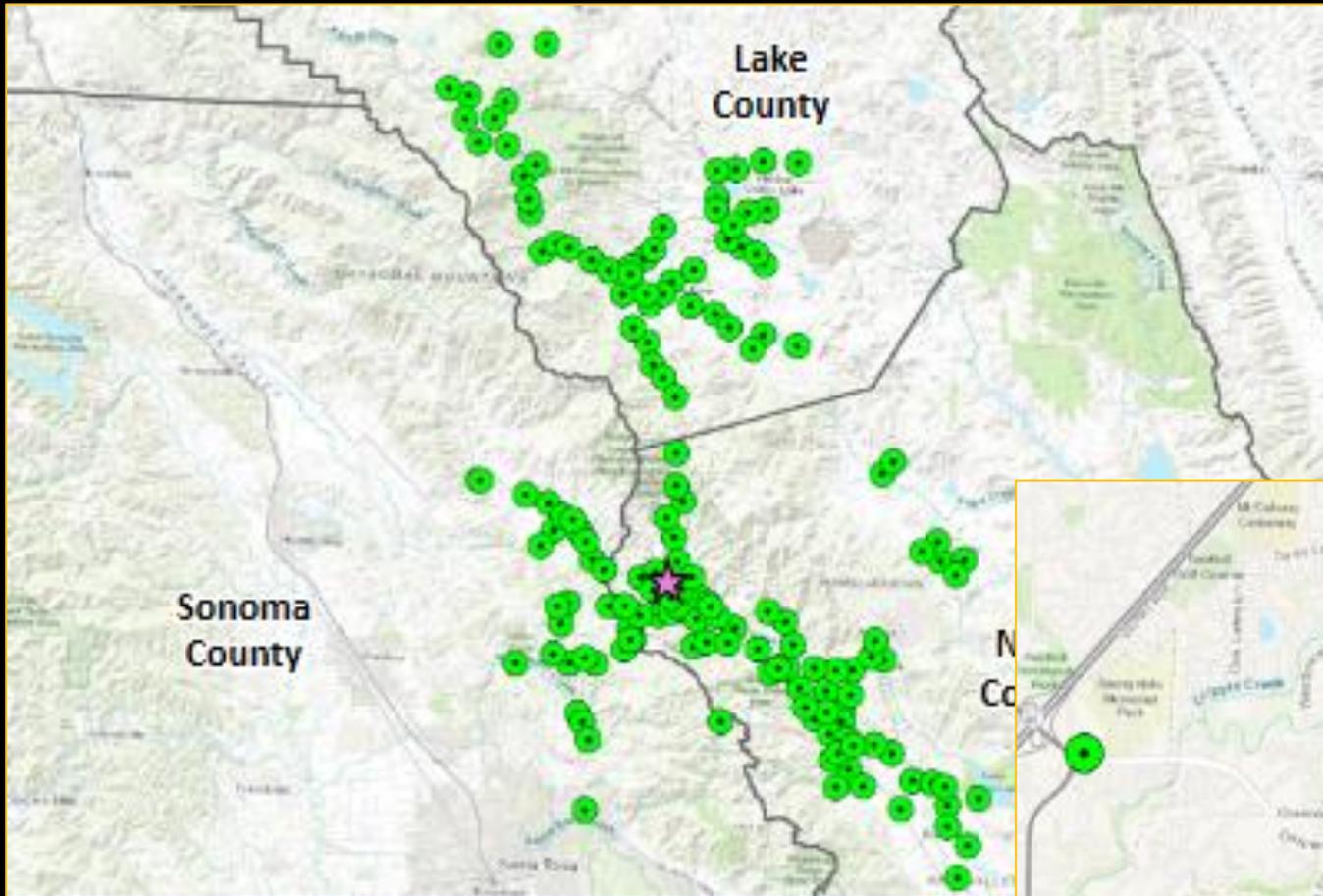
- Tree removals and chemical treatments continued through all the known sites of goldspotted oak borer
- Surveys continued outside of known infestations
- Spots continued to expand



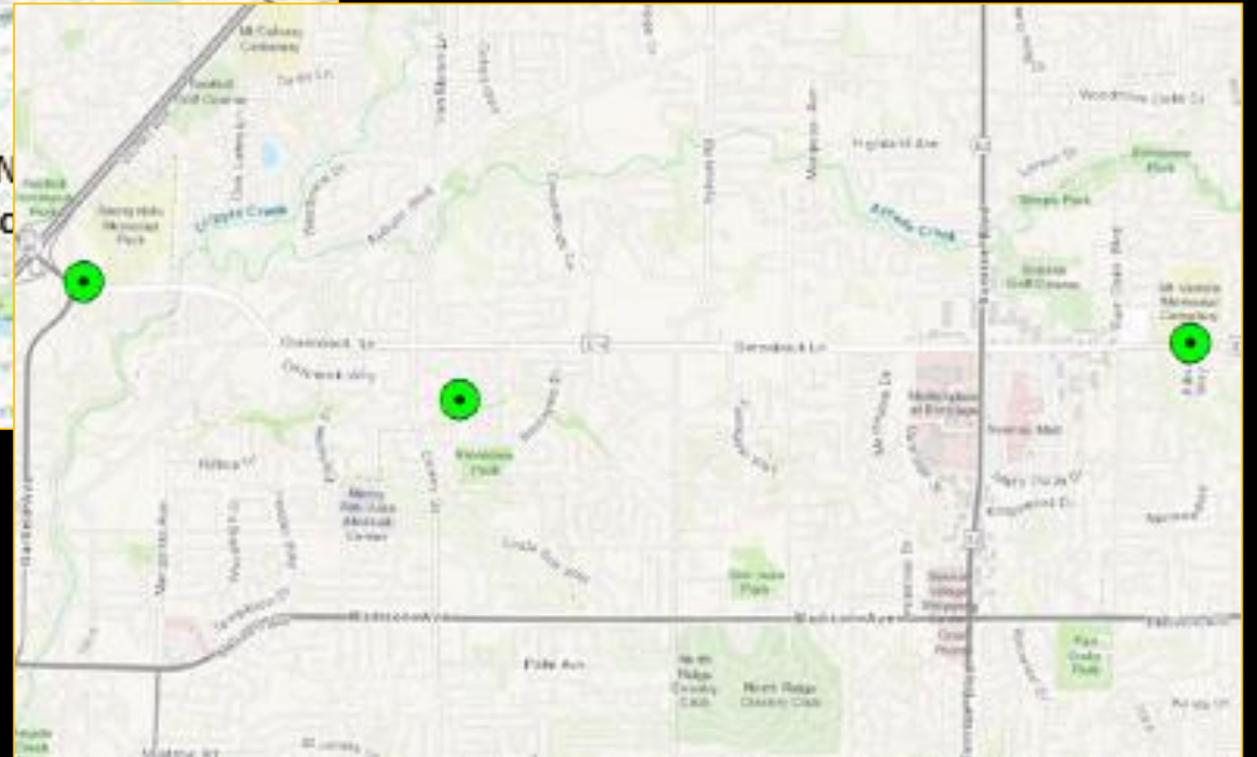
Mediterranean Oak Borer

- Found in Napa, Lake and Sonoma Counties
- A satellite infestation found in Sacramento County (Citrus Heights)
- Attacking valley and blue oaks
- CDFA has given it a “B” rating (invasive but too extensive to control)





Sacramento County Infestation



MOB General Infestation

Invasive Shot Hole Borer/Fusarium Complex



- Nine counties have grants for the removal and proper disposal of amplifier trees
- Statewide trapping efforts
- Education/Outreach and Trapping Coordinators hired
- So far no infestations found in the bordering counties of Kern and San Luis Obispo

Root Diseases

- *Heterobasidion* Root Diseases
- Armillaria
- Black Stain Root Disease
- *Phytophthora* root diseases
- Port Orford cedar root disease

Black Stain
Root
Disease

Large
Heterobasidion
Conk



Sudden Oak Death



Mortality caused by SOD in Santa Clara County



Tanoak symptoms caused by the EU1 lineage of SOD in Del Norte County

Blackwood Acacia Mortality



- Significant numbers of blackwood acacia dying throughout the greater San Francisco Bay area
- Particularly bad in the Oakland Hills
- Cause is still unknown although an invasive canker fungus has been found possibly combined with drought and extreme heat

Incense Cedar Canker

- Incense cedars exhibited dieback (and occasional mortality) throughout California
- Typically, a species of *Seiridium* was isolated from branch and stem cankers
- The fungus was closely related to the one causing cypress canker but genetically distinct



Maple Leaf Scorch

Possibly caused by the xylem limited bacterium *Xylella fastidiosa* and/or environmental conditions



Abiotic Issues



Included:

- Early Leaf Fall of Blue Oaks
- Overstocking
- Herbicide Damage of Coast Redwoods
- **Wildfire Damage!!!**

Invasive Plants

- Both the USDA Forest Service and CDFA along with the Invasive Plant Council of California continued to treat for invasive plants
- Research was ongoing on a weevil as a potential biological control method for yellow star thistle
- Newly established species of concern to forestry include spotted and meadow knapweeds, Dyer's woad, North African wire grass, skeleton weed and stinkwort.



**Spotted Knapweed – Plumas
County**



United States
Department of
Agriculture



Forest Service
Pacific Southwest
Region



California Department
of Forestry and Fire
Protection



California
Forest
Pest Council

Questions?