# PEST ALERT!

**Sudden Oak Death & Goldspotted Oak Borer** 

National Park Service U.S. Department of the Interior

Integrated Pest Management Program, Biological Resources Management Division



## Protect Our Trees. Don't Transport Firewood.



Photo Credit: Joseph O'Brien, USDA Forest Service, Bugwood.org

Attention! Firewood can contain insects and plant pathogens that are harmful to ecosystems. Bringing firewood into the park from other areas can accidentally spread these pest insects and diseases that threaten park resources and the health of our forests. Management of trees infected with these pests involves drastic measures, including complete removal of all trees (infested and otherwise) in the immediate and surrounding areas.

Forest pests and pathogens such as Goldspotted Oak Borer (GSOB) and Sudden Oak Death (SOD) can be easily spread by moving firewood, which may look normal but be infested with the immature stage of these pathogens and insects.

### Your help is needed to prevent the spread of invasive forest pests!

- Purchase firewood directly from the park, when available.
- Do not transport firewood from outside the immediate vicinity of where it is purchased,
- **Follow local quarantines!** Notices of quarantines prohibit in-state and interstate movement of certain plants and plant parts. Interstate movement of firewood, branches, green lumber, other wood exports, from quarantined states is regulated under the Animal and Plant Health Inspection Service (APHIS).
- If you are bringing wood into the park from infested areas, it must be accompanied by a certificate issued from USDA-APHIS, Plant Protection and Quarantine Program, stating that the source is free of infested wood and in compliance with guarantine regulations.
- Know your local firewood guarantines. Visit: www.dontmovefirewood.org.

#### **Sudden Oak Death**

Caused by exotic pathogen *Phytophthora ramorum* which kills the tree.

**Area of Quarantine:** 14 California counties: Alamedia, Contra Costa, Humboldt, Lake, Marin, Mendocino, Monterey, Napa, San Francisco, San Mateo, Santa Clara, Santa Cruz, Sonoma, and Solano; Oregon: 11-square mile area in Curry County

http://pi.cdfa.ca.gov/pqm/manual/pdf/455.pdf http://www.aphis.usda.gov/hungrypests/suddenOakDeath.shtml



Photo credit: http://www.aphis.usda.gov/hungrypests/photoGallery.shtml

#### **Goldspotted Oak Borer**

Causes interference with tree phloem and cambium, resulting in limb and branch die back, and eventually death of the tree. **Area of concern:** southern California

http://cisr.ucr.edu/goldspotted\_oak\_borer.html http://www.nps.gov/yose/naturescience/upload/pest-oak-boreralert.pdf



Photo credit: Tom Coleman, US Forest Service entomologist



Sudden Oak Death & Goldspotted Oak Borer

## **Protect Our Trees. Don't Transport Firewood.**



#### WHY WORRY ABOUT FIREWOOD?

- Firewood can contain insects and disease that kill the trees and ecosystems.
- Management of infected trees often involves drastic measures, including complete removal of all trees in an area.
- In this area, Goldspotted Oak Borer and Sudden Oak Death threaten our forests and are easily spread by moving firewood, which may look normal but be infested.

### Your help is needed to prevent the spread of invasive forest pests!

- Purchase firewood directly from the park, when possible.
- Avoid bringing firewood with you from long distances outside of a park.
- **Learn more** about the risks of Sudden Oak Death and the Goldspotted Oak Borer and other forest threats.
- Know your local firewood quarantines where you live and travel.
- Visit: www.dontmovefirewood.org

### **KNOW YOUR FOREST PEST THREATS!**

Sudden Oak Death





Goldspotted
Oak Borer