



### Sudden Oak Death and Food Security

Some of you may have heard of Sudden Oak Death (SOD). Those who have not should know that this forest disease infects a number of plant species and is often fatal to oak trees, including one of the most important Native food resources: *xunyéep*, tanoak.

Fortunately, the pathogen *Phytophthora ramorum* that causes this disease has not yet arrived in Karuk Ancestral Territory. However, at the Orleans SOD Community Meeting August 2<sup>nd</sup>, scientist Richard Cobb of UC Davis cautioned, “We have to be honest with ourselves and accept that this disease *will* arrive: the question is only when and where.”

Since its discovery in the mid-1990s, SOD has diminished tanoak populations in California and Oregon. Hundreds of millions of dollars have been spent to learn about the disease and prevent its spread, yet there is little hope of stopping it. As funding dries up and scientists and land managers remain at a relative loss for effective treatment, SOD is reaching the doorstep of the three largest California Indian tribes: Yurok, Hoopa Valley, and Karuk.

For local tribes, SOD threatens both *food security* and tribal *food sovereignty*. “Since time immemorial, acorns have sustained tribal people and our animal relations,” said Karuk Food Security Program Coordinator Lisa Hillman. “In an area fraught with economic and environmental instability, being able to access and use these resources is essential to tribal sovereignty.”

Acorns provide optimal nutrients for health and wellbeing, “as well as cultural identity,” says U.S Forest Service Research Ecologist Frank Lake. According to University of Oregon’s Dr. Kari Norgaard, “The loss of traditional food sources is now recognized as being directly responsible for a host of diet related illnesses among Native Americans including diabetes, obesity, heart disease, tuberculosis, hypertension, kidney troubles and strokes.”

“This is not the first traditional staple impacted by modern-day management,” says Karuk cultural biologist Ron Reed, referring to the 2002 Fish Kill that killed 68,000 adult salmon. “While we un-dam the Klamath River, we need to be cleansing the forest with fire.” Prior to a federal ban around the turn of the last century, Native peoples set low-intensity fires at regular intervals to reduce forest pests and improve the health of many Native food, fiber and medicinal plant resources.

While fire may be the obvious remedy to local tribal communities, fire is just the tool that SOD researchers have not tested. Cobb explains: “We don’t know how effective fire will be as a management tool for combating this disease... *because we haven’t been burning.*” To some degree, this may be attributed to the general public’s and government agencies’ fear of fire.

There is a unique need and opportunity for indigenous leadership in this disease prevention effort. The Karuk Department of Natural Resources is proactively working with partners to monitor SOD in the mid-Klamath, and to put fire back on the landscape. And as cultural practitioner Stormie Polmateer asserts, “the land needs the people to visit – to burn, to prune, to harvest, share and enjoy - because if we don’t, these resources will go away.”

To learn more about the Karuk Tribe’s current efforts, visit

- [Karuk Department of Natural Resources](http://www.karuk.us/index.php/departments/natural-resources/dnr) (DNR) <http://www.karuk.us/index.php/departments/natural-resources/dnr> or the
- [Fire Adapted Communities Learning Network](http://fireadaptednetwork.org/about/network-members/) <http://fireadaptednetwork.org/about/network-members/>.

For more on SOD, check out

- [Oak Mortality Task Force](http://www.suddenoakdeath.org/) <http://www.suddenoakdeath.org/>
- [Humboldt UC Extension](http://cehumboldt.ucanr.edu/Programs/Forestry/Sudden_Oak_Death/) [http://cehumboldt.ucanr.edu/Programs/Forestry/Sudden\\_Oak\\_Death/](http://cehumboldt.ucanr.edu/Programs/Forestry/Sudden_Oak_Death/)

And finally, watch for the Karuk Tribe’s upcoming community mobilization efforts in Spring 2017.

– Heather Rickard, Natural Resources Technician for the Karuk Food Security Project