

# Tanoak Resistance Study



A volunteer checks a tanoak tree for acorns.

Conducted by U.C. Berkeley scientists in conjunction with the U.S. Forest Service and the National Park Service, this study aims to find tanoak trees which are genetically resistant to sudden oak death and could be used to reforest areas decimated by the disease. Tanoak trees are highly susceptible to sudden oak death and are dying from it in large numbers.

Since the fall of 2006, thousands of tanoak acorns and leaves have been collected annually from six locations throughout California and Oregon, including from Midpeninsula Regional Open Space District lands. Over 50 District staff and volunteers help with acorn collections. The acorns are grown into young tanoak trees and tested for resistance to sudden oak death both in the laboratory and in the field. The acorns, leaves and stems also provide information genetic variation among different populations

Very little is currently known about tanoak tree genetics, and as part of this study, researchers are also learning more about how tanoak trees are pollinated. Tanoak trees are not true oaks, which are wind-pollinated. Tanoaks have different flower structures than the true oaks and with the help of Open Space District volunteers, researchers are collecting data to determine if tanoaks are wind or insect pollinated, or both.



Planting tanoak acorns at the lab.



Planting young tanoak trees in the field.