May 16, 2018

Native Oaks of El Dorado County
By Heidi Napier
UCCE Master Gardener of El Dorado County

California is blessed with over 20 species of native oaks. Some are trees, and some are shrubs. Six of these species are commonly found in El Dorado County - the Blue Oak, Valley Oak, Interior Live Oak, Canyon Oak, California Black Oak, and Huckleberry Oak. All of these except the Huckleberry Oak are adapted to summer heat and drought. The Huckleberry Oak is found at higher elevations in the Tahoe area and is a low-growing, evergreen shrub. Blue, Valley and California Black Oaks are deciduous, and the others are evergreen. The Valley Oak is the largest oak in the US and found only in California. It used to cover much of the Central Valley and may live 500 years. A preserved section of a large Valley Oak trunk is in the lobby of County Building C, and the growth rings are marked with labels telling the dates the rings were formed.

Our native oaks are survivors; most of them can take poor, rocky soil and little or no summer water. Unfortunately, they are not so good at surviving the changes that humans have brought to California. Clearing for building and agriculture have greatly decreased many native oaks species. The type of landscaping that we have brought to our state is not friendly to our oaks. Lawns and other thirsty landscapes are a death sentence to trees that are adapted to dry summers. Many native oaks will develop a fungal infection of their roots from summer irrigation, and this kills them slowly, as evidenced by gradual loss of the leaf canopy.

Urbanization damages trees in other ways. Paving over the roots of any tree will starve it of water and oxygen, and this is especially damaging to native trees that might be over 100 years old. These trees depend on an extensive root system that may extend beyond the drip line of the tree and grow as deep as 30 feet to find water. Trenching through root zones is also harmful, and changing the grade over roots is not good because it covers roots with more soil or exposes them by removing soil.

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Native oaks have a fascinating behavior called masting. Blue and Valley Oaks coordinate their efforts to produce acorns. In a mast year, almost all the oaks in most of California produce a heavy acorn crop. In other years, few acorns are produced. This phenomenon occurs in other trees, and it's being studied, but we don't know how the oaks communicate and decide when to produce a bumper crop. It appears unrelated to weather; 2015 was a mast year for oaks, in spite of 4 years of drought. Because so many wild animals depend on acorns for food, masting has a profound effect on wildlife. The word "mast" has nothing to do with flag poles or sailing ships; it comes from the old English "maest," which means a bumper crop of nuts on the ground. Acorns and other nuts were important sources of food for livestock during the middle ages, and farmers would herd hogs and cattle into the forests to harvest fallen acorns.

To learn more about our handsome and enduring California Oaks, join Master Gardener Heidi Napier on May 19, 9:00 a.m. to noon, at the El Dorado Hills Library, 7455 Silva Valley Pkwy, El Dorado Hills. Learn various methods to maintain and protect our wonderful trees, and the care they need to thrive.

UCCE Master Gardeners of El Dorado County are available to answer home gardening questions Tuesday through Friday, 9:00 a.m. to noon, by calling (530) 621-5512. Walk-ins are welcome at our office, located at 311 Fair Lane in Placerville. For more information about our public education classes and activities, go to our UCCE Master Gardeners of El Dorado County website at http://mgeldorado.ucanr.edu. Sign up to receive our online notices and e-newsletter at http://ucanr.edu/master gardener e-news. You can also find us on Facebook.