GRANT $$ for Masters student

RRR (River Ridge Ranch) is providing funding to support a 2-year Master student who will investigate the relation between oak life history and oak reproductive effort.

Details below: if interested contact Paul Laris or Mystsyn Mills

This grant teams River Ridge Institute, CSULB and Alta Peak CNPS to magnify the extent and impact of results by providing scholarship funding to support a 2-year Master student who will investigate the relation between oak life history and oak reproductive effort.

CSULB already has an archive of multiple years of high resolution multispectral imagery on River Ridge; it allows mapping every tree on the 722-acre ranch, from 1,000' elevation to 3,000' and across Riparian, Old Field, Blue Oak Woodland and Chaparral. For hundreds of these trees, we also have data on height, dbh, canopy diameter, canopy volume, carbon content and indices of health and the ranch is re-flown several times per year.

What is needed to complete the research proposed herein is a quantification of the reproductive effort per tree. These data will be obtained in the Fall of 2023/2024 by visiting trees identified in the database and scoring them for the presence and absence of acorns, estimating the extent of acorn production by proportion of the tree and estimating the quantity of acorns by subsampling branches. That will permit an estimate of the total number of acorns produced per tree and that can then be related to a variety of variables to look for patterns.

The project will provide information valuable to restoration specialists looking to maximize the success of horticultural and conservation of oaks in general by selecting fruit from proven survivor parent trees. The work will be accomplished in Tulare County and the Southern Sierra Nevada Foothills. In addition to River Ridge Ranch, Masters students also have access to Circle J Norris Ranch, which is also being studied by CSULB, and currently has a CSULB student working there on blue oak mortality.

The student scholarship recipient will be a fully-enrolled 2- year graduate student of either Geography or Environmental Science and Policy at California State University, Long Beach and will therefore have met their requirement for entrance into the graduate program and ability to undertake independent research. The final product will be a Master thesis presented to the faculty of California State University, Long Beach and a final presentation and defense of the research.