California Native Plant Society

Sanhedrin Chapter
Inland Mendocino and Lake Counties
sanhedrin.cnps.org
California Native Plant Society

Monday, March 8, 2021

Dear Mendocino County Board of Supervisors,

We are writing in support of a robust Oak and Oak Woodland Protection Ordinance for Mendocino County. The Sanhedrin Chapter of the California Native Plant Society would like to see an oak ordinance that is clear, concise, and leads to real protection for our oaks and oak woodlands in Mendocino County. We are open to alternatives that provide real protection, but we will not support weak substitutes. Below we outline the advantages of preserving oak woodlands, as well as some of our concerns and suggestions for the existing draft oak woodland protection ordinance.

Eighty four percent of oak woodlands and forests in the North Coast are privately held (Gamon 2006). Pressures on oak woodlands include but are not limited to: Cannabis cultivation in remote locations – often in rangelands which are prime oak woodland habitat; Vineyard development outside of zoned Agricultural lands; Cutting for firewood; and Residential development in the wildland- urban interface. Because the vast majority of our oak resources are privately held, it is important that this ordinance encode guidance to landowners to preserve our valuable resources.

Mendocino County has high oak species diversity, and currently has large tracts of intact oak woodland habitat. Our sub-urban developments also have high oak density and diversity.

Importance of oak woodlands:

1) Oak woodlands help Mendocino County meet its carbon sequestration goals. Oaks store large quantities of carbon in living and dead material, as well as in understory vegetation, organic litter and stored soil carbon.
   According to Gamon (An Inventory of Carbon and California Oaks, 2008), oak woodlands have the following range of carbon storage per hectare:
   > "Sequestration in understory shrubs ranged from 11-21 metric tons per hectare, depending on shrub density and increasing with stand age. Coarse woody debris varied according to fuel loading at 5-14 tons per hectare on average, actually decreasing with stand age. Duff and litter carbon varied from 28-31 tons per hectare and stayed consistent across age classes. Soil organic matter, down to a depth of one meter, was also consistent at 28 tons per hectare in these forest and woodland types. From these additional carbon pools, an additional 350 million tons of carbon are stored in oak woodlands and oak forests. Therefore, California oak woodlands and forests combined sequester over 675 million metric tons of carbon."

   Gamon (2008) estimates Mendocino County stores 28,579,950 metric tons of carbon in oak forests, and 14,740,523 metric tons of carbon in oak woodlands, *higher storage rates than any other county in California*. We have a treasure that is worth preserving.

2) Oak woodlands deliver essential ecosystem services such as
   a. stabilizing soils,
   b. helping precipitation slowly infiltrate into soils, and
   c. providing critically scarce high-quality wildlife habitat.

3) Our oak woodlands are aging with limited recruitment of new trees. California oaks grow slowly, and young oaks are having difficulty surviving pressures of current land use practices, including grazing. We are losing old trees to old age, fir encroachment, wildfire, and removals, but oak tree replacement is not keeping up with oak loss.

Comments on what we would like to see in the Oak Woodland Protection Ordinance:

The current draft of the oak ordinance is complex and will not actually provide oaks and oak woodlands with effective and lasting protections. There are some confusing definitions, exemptions that weaken protections, and consequences for violations that will do little to inhibit oak removals. We appreciate the efforts of the Planning and Building Department to create a working document, and support their efforts to continue to improve it.

1. The exemptions in the current document have improved from initial drafts, but should still be refined to ensure that they don't encourage further loses of our oak resources. We would like to see practical exemptions for homeowners and landowners that do not, at the same time, allow for any and all activities to occur without mitigation.
2. Fines for violations of the oak ordinance are too low to act as an effective deterrent, and consequences such as land use restrictions for egregious violations should be included.
3. Mitigation replacement should focus on replacement success with an emphasis on best practices, monitoring and enforcement. Successful replacement rates should exceed oak removal and attrition, which will require an initial replacement rate that is high. To replace a mature oak, high recruitment is required. It takes a human lifetime for most of our California oak species to reach maturity. The chances of any one of the replacements (recruits) surviving to mature status are very low. A ten-year mitigation monitoring program will only demonstrate the survival rate of young saplings, not the actual replacement of the adult, so a high replacement ratio is appropriate.
4. Shrub oaks are not adequately protected. These small diameter oaks can be much older than they appear, and provide critical wildlife habitat and other ecosystem services.
5. It should be made abundantly clear in the document that rangelands are not included in the Agricultural zoning land exemptions. This has not been clear to reviewers from outside of the county. Rangelands contain the bulk of our oak woodlands and upland watersheds and should be protected.
6. **Data are needed to help make good policy, but any attempt to improve the available data *should not preclude immediate oak protections in Mendocino County*.** There are previous studies that have attempted to record the oak resources of our county (see Giusti 2001, and Gamon 2006 and 2008 references), but they are dated and incomplete because full data sets do not exist for Mendocino County vegetation. A well-developed map of oak woodlands, rangeland resources, and a vegetation map for this county would be a good tool for county planners to help them identify areas where activities would be appropriate or inappropriate. This could also be valuable for reducing housing development in Wildland Urban Interface (WUI) zones.

Suggested Action item: Collaborate with partners to acquire planning grants, and develop data and mapping layers. Partners could include the UC Extension Forest Advisor Mike Jones, Mendocino County Resource Conservation District, and CDFW's VegCAMP program (https://wildlife.ca.gov/Data/VegCAMP), and the CA Wildlife Conservation Board for Regional Conservation funding (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=165041&inline). Some CAWCB grants are available to help regions do conservation planning.

Sincerely,

Jennifer Riddell, PhD, Co-President
Andrea Davis, C0-President

References:

Gamon, T. 2008. An Inventory of Carbon and California Oaks. [online] https://californiaoaks.org/wp-content/uploads/2016/04/CarbonResourcesFinal.pdf

Gamon, T. and Firman, J. 2006. Oaks 2040: The Status and Future of Oaks in California. Published by the California Oak Foundation, Oakland, CA. www.californiaoaks.org/Oaks2040

Giusti, G. A. 2001. Oak Woodlands of Mendocino County: An Assessment of Their Distribution, Ownership Patterns and Policies and Projects affecting their Conservation. [online] URL: http://danr.ucop.edu/ihrmp. 66 pp.

Further references on oak woodland research are available at the UC Berkeley Oaks page: https://oaks.cnr.berkeley.edu/resources/publications/