

El Dorado County Board of Supervisors  
360 Fair Lane  
Placerville, CA 95667  
États-Unis d'Amérique

Dear Supervisors:

I participated in the early PAWTAC meetings, both as a resident of District 2 and as an employee of the California Department of Forestry who had access to data and GIS technology relevant to the oak woodlands issue. I left the area in 2004 after 14 years of residency to pursue other career opportunities. Our time in the County meant a lot to my family, and so I have continued to observe from a distance the on-going debate about oak woodlands and the Integrated Natural Resource Management Plan (INRMP). With that in mind, I would like to summarize the key points in the scientific paper that Shawn Saving and I wrote in 2002 regarding oak woodland habitat in El Dorado County.

Our paper assessed various policies and projects proposed for the conservation of oak woodland. One of the principal metrics for judging conservation was the fragmentation of wildland oak woodland by development. Wildland oak woodland consists of oak woodlands located more than 60 yards from a developed site, in patches greater than 250 acres in extent without constrictions less than 60 yards across. The references on the relationship between species richness and oak woodland patch size available at that time indicated that one could expect patches of such sizes to maintain a representative sample of birds and small mammals generally associated with oak woodlands.

More important however was the willingness of members of PAWTAC at the time to accept such definition as a reasonable first approximation for natural oak woodlands. This acceptance sprang from a sense of the community regarding its perception of the nature and value of oak woodlands in the County.

The analyses of buildout of the General Plan under a wide range of policy alternatives nearly always showed an increase in the fragmentation of wildland oak woodland, with a split of the oak woodland band into northern and southern fragments by development along US Highway 50 between Shingle Springs and Placerville.

This decrease in connectivity may be regionally important. The oak woodlands in the foothills of the Sierra Nevada consist of a NW-SW trending band extending the entire length of the range, from Lassen to Kern Counties. This habitat is among the richest biologically in the State. Development processes since 1849 have tended to be E-W in orientation, with railroads, highways, reservoirs and finally urbanization cutting across this band of habitat and decreasing the ease of movement of genes and organisms through their ancestral range. Measures of fragmentation give a quantitative assessment of this process and their potential biological ramifications.

It is not a meaningless ecological question to ask which species will go extinct with increases in fragmentation, but it completely misses the point of the original PAWTAC analysis. The definition of wildland oak woodland and the use of connectivity (the inverse of fragmentation) as a measure of success were employed because a reliance on maintaining intact habitat would allow the County to avoid planning driven by the Endangered Species Act, a situation which greatly reduces local control of development.

In our analysis, we found that no combination of General Plan policies (for example, stream buffers, slope restriction on building, oak canopy retention, and clustered development) would prevent the severing of the N-S band of oak woodlands. This outcome occurred because the key areas of connection had been subdivided years before and were therefore no longer governed by General Plan policies. The connectivity of oak woodlands across the Highway 50 corridor exists today only because owners of vacant parcels have not yet exercised their rights to a building permit while owners of some larger parcels with structures have nonetheless maintained the wildland oak woodlands on their property.

The only action that promised to maintain connectivity across the US 50 corridor was a parcel acquisition strategy focused, not on distant woodlands unlikely to be developed in the near future, but rather on exactly those relatively few parcels near Highway 50 that are providing connectivity today.

This acquisition strategy raises a host of difficult issues, including but not limited to funding, but has the great advantage of maintaining connectivity and therefore the integrity of oak woodlands at levels congruent with both the needs of oak woodland species and the perception of the County's residents.

Sincerely,

Greg Greenwood