

ORDINANCE NO. 3342
ORDINANCE OF THE MARIN COUNTY BOARD OF SUPERVISORS
AMENDING TITLE 22
TO REENACT PROVISIONS FOR
NATIVE TREE PRESERVATION AND PROTECTION

SECTION I: FINDINGS:

- I. WHEREAS, the Board of Supervisors adopted the Marin Countywide Plan on January 18, 1994; and
- II. WHEREAS the Environmental Quality Element (Policy EQ-3.14) directs that the County strive to prevent the untimely removal of trees through the implementation of a tree preservation ordinance; and
- III. WHEREAS the Marin County Community Development Agency prepared a draft ordinance establishing regulations for the preservation and protection of native trees ("Ordinance") and circulated it for public review and comment; and
- IV. WHEREAS the Marin County Planning Commission held three public workshops on February 26, 1996, October 7, 1996, and November 4, 1996 to review and receive public input on the Ordinance; and
- V. WHEREAS the Marin County Planning Commission held a public hearing on November 16, 1998 and adopted a Resolution (#PC98-128) recommending that the Marin County Board of Supervisors consider adoption of the Ordinance with revisions; and
- VI. WHEREAS the Marin County Board of Supervisors held a public hearing on March 23, 1999, and adopted the Ordinance for a period of 3 years at which time it would be reconsidered for further implementation; and
- VII. WHEREAS the Marin County Planning Commission held a public hearing on April 8, 2002, and recommended that the Ordinance be reenacted by the Marin County Board of Supervisors; and
- VIII. WHEREAS the Marin County Board of Supervisors held a public hearing on April 16, 2002 to consider the recommendation of the Marin County Planning Commission; and
- IX. WEHREAS the Marin County Board of Supervisors finds it is in the public interest to reenact the Ordinance for the purpose of promoting the health, safety, and general welfare of the residents of Marin County, insofar as trees provide a wide variety of functions, values and benefits including:
 - 1. Providing an important and essential functional element of the plant communities that constitute Marin County's natural heritage;
 - 2. Providing habitat for wildlife;
 - 3. Stabilizing soil and improving water quality by reducing erosion and sedimentation;
 - 4. Allowing for the natural replenishment of groundwater supplies by reducing stormwater runoff;
 - 5. Controlling drainage and restoring denuded soil subsequent to construction or grading;
 - 6. Preserving and enhancing aesthetic qualities of the natural and built environments and maintaining the quality of life and general welfare of the County;
 - 7. Reducing air pollution by absorbing carbon dioxide, ozone, particulate matter, and producing oxygen;
 - 8. Assisting in counteracting the effects of global warming resulting from the depletion of forest and urban trees;

- 9. Conserving energy by shading buildings and parking areas;
- 10. Maintaining and increasing real property values;
- 11. Reducing wind speed and human exposure to high winds and other severe weather;
- 12. Assist in reducing noise pollution through the effects of vegetative buffers

- IX. WHEREAS the Marin County Board of Supervisors finds that the Ordinance is consistent with the Marin Countywide Plan, and specific recommendations of the Environmental Quality Element; and
- XI. WHEREAS the Marin County Board of Supervisors certified an Environmental Impact Report for the Marin Countywide Plan which did not identify any potentially adverse impacts as a result of the Ordinance; and
- XII. WHEREAS the Marin County Board of Supervisors finds that the Ordinance is exempt from the requirements of the California Environmental act pursuant to Section 15061, 15062, and 15378 because it involves the adoption of procedures intended to protect the environment pursuant to programs in the adopted Countywide Plan; and

SECTION II: AMENDMENTS TO TITLE 22:

NOW, THEREFORE, LET IT BE ORDAINED THAT the Marin County Board of Supervisors hereby adopts amendments to Title 22 (Zoning) of the Marin County Code, which amendments would reenact the zoning regulations pertaining to Native Tree Preservation and Protection established in Chapter 22.75 of the Marin County Code. (See Exhibit A of this Ordinance.)

SECTION III: EFFECTIVE DATE

The Ordinance shall be, and is hereby declared to be, in full force and effect on May 16, 2002, and shall be published once before the expiration of fifteen (15) days after its passage with the names of the Supervisors voting for and against the same, in the *Marin Independent Journal*, a newspaper of general circulation published in the County of Marin.

SECTION IV: VOTE

PASSED AND ADOPTED at a regular meeting of the Board of Supervisors of the County of Marin held on this 16th day of April, 2002 by the following vote:

- AYES: SUPERVISORS John B. Kress, Harold C. Brown, Jr., Annette Rose, Cynthia L. Murray
- NOES: NONE
- ABSENT: SUPERVISOR Steve Kinsey

PRESIDENT, BOARD OF SUPERVISORS

ATTEST:

CLERK

EXHIBIT A (Revised) – Ordinance 3342

Chapter 22.75

NATIVE TREE PRESERVATION AND PROTECTION

Sections

- 22.75.010 Purpose
- 22.75.020 Applicability
- 22.75.030 Definitions
- 22.75.040 Prohibition on Removal of Protected Trees
- 22.75.050 Exemptions
- 22.75.060 Management Guidelines
- 22.75.070 Oak Woodland Management Education Guidelines
- 22.75.080 Tree Removal Permit
- 22.75.090 Application for Tree Removal Permit
- 22.75.100 Action on Tree Removal Permit - Criteria
- 22.75.110 Replacement Requirements
- 22.75.120 Appeals
- 22.75.130 Violations and Penalties
- 22.75.140 Tree Replacement Fund
- 22.75.150 Site Inspection
- 22.75.160 Liability

22.75.010 Purpose. The purpose of this Chapter is to establish regulations for the preservation and protection of native trees in the non-agricultural unincorporated areas of Marin County by limiting tree removal in a manner which allows for reasonable use and enjoyment of such property. This ordinance does not confer any obligation on the part of the County to protect viewsheds. The ordinance is intended to:

- (A) Control the removal of protected trees and maintain and enhance tree cover on improved and unimproved property to ensure that values and benefits provided by native trees are realized;
- (B) Prevent the unpermitted wholesale removal of a majority of native trees on a parcel prior to application for a development permit.
- (C) Protect woodland environments on agricultural land through an educational outreach program;
- (D) Educate residents of the County about the functions, benefits and values of trees to further the protection, preservation, and regeneration of trees.

The Board of Supervisors of the County of Marin finds it in the public interest to adopt a native tree preservation and protection ordinance for the purpose of promoting the health, safety, and general welfare of the residents of Marin County, insofar as trees provide a wide variety of functions, values and benefits including:

1. Providing an important and essential functional element of the plant communities that constitute Marin County's natural heritage;
2. Providing habitat for wildlife;

3. Stabilizing soil and improving water quality by reducing erosion and sedimentation;
4. Allowing for the natural replenishment of groundwater supplies by reducing stormwater runoff;
5. Controlling drainage and restoring denuded soil subsequent to construction or grading;
6. Preserving and enhancing aesthetic qualities of the natural and built environments and maintaining the quality of life and general welfare of the County;
7. Reducing air pollution by absorbing carbon dioxide, ozone, particulate matter, and producing oxygen;
8. Assisting in counteracting the effects of global warming resulting from the depletion of forest and urban trees;
9. Conserving energy by shading buildings and parking areas;
10. Maintaining and increasing real property values;
11. Reducing wind speed and human exposure to high winds and other severe weather;
12. Assist in reducing noise pollution through the effects of vegetative buffers.

22.75.020 Applicability. This ordinance applies only to “protected trees” as defined in Section 22.75.030 (Definitions) on improved and unimproved parcels as defined in Section 22.75.030 (Definitions) in the non-agricultural unincorporated areas of Marin County. Protected trees may be removed in specific circumstances as stated in Section 22.75.050 (Exemptions) without triggering a requirement for a permit.

The ordinance provides an opportunity for a property owner to request permission to remove a protected tree (which cannot otherwise be removed pursuant to the exemptions described in Section 22.75.050 - Exemptions) as allowed by the Tree Removal Permit process described in Sections 22.75.080 - Tree Removal Permits, 22.75.090 - Application for Tree Removal Permit, and 22.75.100 - Action on Tree Removal Permit - Criteria. Trees which are not defined as “Protected Trees” are not covered by the provisions in this ordinance.

22.75.030 Definitions. For the purposes of this Chapter, the following terms, words and phrases, as interpreted by the Director, shall have the meanings respectively ascribed to them by this section, unless the context otherwise requires.

- (A) Agriculture. The breeding, raising, pasturing, and grazing of livestock, for the production of food and fiber, the breeding and raising of bees, fish, poultry, and other fowl; and the planting, raising, harvesting and producing of agricultural, aquacultural, horticultural and forestry crops.
- (B) Arborist. "Arborist" means: 1) a person currently certified by the Western Chapter of the International Society of Arboriculture as an expert on the care of trees; 2) a consulting arborist who satisfies the requirements of the American Society of Consulting Arborists; or 3) such other qualified professionals who the Director determines has gained through experience the qualifications to identify, remove or replace trees.
- (C) CC&R's. CC&R's (Covenants Conditions and Restrictions) are restrictive limitations which may be placed on a property and its use, and which usually are made a condition of holding title or lease. CC&R's are not enforced by the County.
- (D) DBH. "DBH," or diameter at breast height, means the diameter of a tree trunk measured in inches at a height of 4.5 feet above ground while standing on level ground or from the uphill side of the tree. If a tree splits into multiple trunks below 4.5 feet, the trunk is measured at its most narrow point beneath the split.
- (E) Discretionary Permit. "Discretionary permit" means a permit issued by the County on a zoning/development application which requires the reviewing authority to use judgment in making a decision to approve, approve with conditions or deny an application. Zoning/development applications which require discretionary approval, include, but are not

necessarily limited to Master Plan, Development Plan, Tentative Subdivision Map, Design Review, Coastal Permit, Variance, Use Permit, and Tidelands Permit.

- (F) Director. "Director" means the director of the Marin County Community Development Agency or his/her designee.
- (G) Dripline. "Dripline" means a vertical line extending from the outermost edge of the tree canopy to the ground.
- (H) Fire Inspector. A person empowered by the Chief of a fire department or fire protection district to inspect property for fire safe landscape, wildland management or fire protection.
- (I) Native Tree. "Native Tree" means any tree listed in Exhibit 1, Trees Native to Marin County.
- (J) Native Tree Removal. "Native Tree removal" or "removal of a tree" generally means the destruction of any protected tree or the alteration of any protected tree which may adversely affect the health and survival of the tree. Routine trimming and pruning is not considered tree removal for the purpose of this ordinance.
- (K) Unimproved Parcel. "Unimproved Parcel" means a parcel which is not occupied with a building(s) or structure(s), as defined by Title 22 of the County Code, or is occupied only by a building(s) or structure(s) that does not require a building permit pursuant to Title 19 of the County Code.
- (L) Improved Parcel. "Improved Parcel" means a parcel which is occupied with a building(s) or structure(s), as defined by Title 22 of the Marin County Code, which requires a building permit pursuant to Title 19 of the County Code.
- (M) Protected Trees. A "protected tree" means any one of the following:

1. **Trees on an Unimproved Parcel.** Any individual native tree with a Diameter at Breast Height (DBH) as specified in Attachment 1 which is located on an unimproved parcel is a protected tree.
2. **Trees on an Improved Parcel.** More than a total of five (5) trees of any native species each of which having a DBH as specified in Attachment 1 where the removal of such trees occurs within any 12 month period on an improved parcel.
3. **Trees Required as Condition of Approval.** Any tree required to be planted or preserved as a condition of approval of a County discretionary permit application where such tree does not meet one or more of the exemption criteria described in Section 22.75.050 (Exemptions).

22.75.040 Prohibition on Removal of Protected Trees. Protected Trees defined in Section 22.75.030 (Definitions) shall not be removed except as provided for in Section 22.75.050 (Exemptions) and as provided for in Section 22.75.080 (Tree Removal Permits).

22.75.050 Exemptions to the Prohibition on Removal of a Protected tree. In order to remove a protected tree, the property owner must determine that the tree meets one or more of the following criteria for removal:

- (A) The tree is not specifically defined as a protected tree by this Chapter.
- (B) The general health of the tree is so poor due to disease, damage, or age that efforts to ensure its long-term health and survival are unlikely to be successful.
- (C) The tree is infected by a pathogen or attacked by insects that threaten surrounding trees as determined by an arborist report or other qualified professional as defined above.
- (D) The tree is a potential public health and safety hazard due to the risk of its falling and its structural instability cannot be remedied.

- (E) The tree is a public nuisance by causing damage to improvements, such as building foundations, retaining walls, roadways/driveways, patios, sidewalks and decks, or interfering with the operation, repair, or maintenance of public utilities.
- (F) The tree has been identified by a Fire Inspector as a fire hazard.
- (G) The removal of the tree has been specifically proposed and authorized as part of the final approval of a discretionary development permit, including but not necessarily limited to Master Plan, Development Plan, Design Review, Coastal Permit, Tentative Subdivision Map, Final Subdivision Map, Use Permit, or Variance.
- (H) The tree was planted for a commercial tree enterprise, such as Christmas tree farms or orchards.
- (I) Prohibiting the removal of the tree will conflict with CC&R's which existed at the time this ordinance was adopted.
- (J) The tree is located on land which is zoned agriculture (A, ARP, APZ, C-ARP or C-APZ) and is used for commercial agricultural purposes. (This criteria is provided to recognize the agricultural property owner's need to manage these large properties and continue their efforts to be good stewards of the land.)
- (K) Any public agency to provide for the routine management and maintenance of public land or to construct a fuel break during a fire.
- (L) The tree was removed prior to the effective date of this Chapter.

It is recommended that a property owner obtain an arborist report or verify the status of the tree with photographs to document the applicability of the criteria listed above to a tree which is considered for removal pursuant to this section. Property owners removing trees under the provisions of this section are encouraged to review the management guidelines set forth in this ordinance (Section 22.75.060 - Management Guidelines). Efforts should be made to encourage regeneration and replanting where appropriate.

22.75.060 Oak Woodland Management Guidelines. When trees are removed and/or management plans are prepared, pursuant to the provisions of this Chapter, the management guidelines shown in Exhibit 2 (Oak Woodlands) should be taken into consideration.

22.75.070 Oak Woodland Management Educational Guidelines. The County of Marin shall mail a copy of the oak woodland management guidelines (Exhibit 2) to all owners of properties greater than 60 acres zoned for agricultural use. In addition, the County shall make copies of the oak woodland management guidelines available for distribution to any interested person.

22.75.080 Tree Removal Permit. The owner of property upon which a protected tree is located may request to remove protected trees not otherwise exempt from this chapter pursuant to Section 22.75.050 (Exemptions) by filing an application for a Tree Removal Permit.

22.75.090 Application and Fees for a Tree Removal Permit. Application for ~~an~~ a Tree Removal Permit shall be made to the Director in the form of a written application, together with the appropriate fee, and other graphic or written material as may be required to describe clearly and accurately the proposed tree removal as it pertains to the criteria listed in Section 22.75.100 (Action on Tree Removal Permit - Criteria).

22.75.100 Action on Tree Removal Permit - Criteria. The Director shall approve or disapprove applications for Permits pursuant to this ordinance. However, if the Director determines that significant policy questions are at issue, the Director may refer the application to the Planning Commission for action. For the Director, or other appropriate County decision making body, to grant a Permit to remove a

protected tree, it shall be necessary to find that removal of the tree(s) is necessary for the reasonable use and enjoyment of land under current zoning regulations and Countywide Plan and Community Plan (if applicable) policies and programs, taking into consideration the following criteria:

- (A) Whether the preservation of the tree would unreasonably interfere with the development of land;
- (B) The number, species, size and location of trees remaining in the immediate area of the subject property;
- (C) The number of healthy trees that the subject property can support;
- (D) The topography of the surrounding land and the effects of tree removal on soil stability, erosion, and increased runoff;
- (E) The value of the tree to the surrounding area with respect to visual resources, maintenance of privacy between adjoining properties, and wind screening;
- (F) The potential for removal of a protected tree to cause a significant adverse effect on wildlife species listed as threatened or endangered by State or Federal resource agencies pursuant to the California Environmental Quality Act (CEQA);
- (G) Whether there are alternatives that would allow for the preservation of the tree(s), such as relocating proposed improvements, use of retaining walls, use of pier and grade beam foundations, paving with a permeable substance, the use of tree care practices, etc.

22.75.110 Replacement Requirements for a Permit Validly Obtained. In order to mitigate for any trees removed under the provisions of this ordinance, the Agency Director may require one or more of the following:

- (A) Establishment and maintenance of replacement trees. Replacement trees should be predominantly native species that are not highly susceptible to Sudden Oak Death Syndrome or other disease.
- (B) For large properties, a management plan which designates areas of the property for preservation of young stands of trees or saplings.
- (C) Removal of invasive exotic species.
- (D) Posting of a bond to cover the cost of an inspection to ensure success of measures described above.

In the event that tree planting on the site is not feasible or appropriate, the following may be required:

- In lieu of planting on the specific property, the Director may require payment of money in the amount of \$100.00 per tree removed to be deposited into the Tree Replacement Fund managed by the Marin County Open Space District for planting and maintenance of trees and other vegetation.

22.75120 Appeals. The decision to approve or disapprove an application for a Tree Removal Permit, may be appealed pursuant to Chapter 22.89 of this code.

22.75130 Violations and Penalties. Where any person, firm, or corporation violates the provisions of this Ordinance, the Director may pursue an enforcement action under the provisions of the Marin County Code, Title 22, and as provided for in Chapter 1.05, Nuisance Abatement. The procedures may result in substantial fines for enforcement costs and civil penalties, the exact amount to be determined through the abatement process.

22.75140 Tree Replacement/Preservation Fund. Moneys for civil penalties received by the County as provided for in Section 22.75.130 or money received in lieu of replacement planting (Section 22.75.110) shall be forwarded to the General Manager of the Marin County Open Space District for deposit in a Tree Replacement/Preservation Fund. Under no circumstances shall the moneys collected by the General Manager for the Tree Replacement/Preservation Fund be directed to any other account or used for any purpose other than the planting and maintenance of trees or other vegetation (1) on lands owned and managed for park or open space purposes by the Marin County Open Space District or the County of Marin; and (2) for public uses as directed by the Marin County Board of Supervisors.

22.75.150 Site Inspection. The Director shall seek entry to private property for the purpose of conducting an inspection to determine whether trees have been removed in violation of this chapter. The Director shall first seek the property owner's permission to conduct such an inspection.

22.75.160 Liability. Nothing in this Chapter shall be deemed to impose any liability upon the County, its officers and employees, nor to relieve the owner of any private property from the responsibility to maintain any tree on his/her property in such condition as to prevent it from constituting a hazard or impediment to travel or vision upon any public right-of-way.

ATTACHMENT 1 - Ordinance #3342

Trees Native to Marin County

Botanical Name	Common Name	Diameter at Breast Height
<i>Acer macrophyllum</i>	Big-leaf maple	10 inches
<i>A. negundo</i> var. <i>californicum</i>	Box elder	10 inches
<i>Aesculus californica</i>	California buckeye	10 inches
<i>Alnus rhombifolia</i>	White alder	10 inches
<i>A. rubra</i>	Red alder	10 inches
<i>Amelanchier alnifolia</i>	Service-berry	10 inches
<i>Arbutus menziesii</i>	Pacific Madrone	6 inches
<i>Castanopsis chrysophylla</i>	Giant Chinquapin	10 inches
<i>Cercocarpus betuloides</i>	Mountain-mahogany	10 inches
<i>Crataegus douglasii</i>	Hawthorn	10 inches
<i>Cupressus sargentii</i>	Sargent cypress	6 inches
<i>Fraxinus latifolia</i>	Oregon ash	10 inches
<i>Garrya elliptica</i>	Silk tassel	10 inches
<i>Lithocarpus densiflorus</i>	Tanbark oak	10 inches
<i>Myrica californica</i>	Wax myrtle	10 inches
<i>Pinus muricata</i>	Bishop pine	10 inches
<i>Pseudotsuga menziesii</i>	Douglas-fir	10 inches
<i>Quercus agrifolia</i>	Coast live oak	6 inches
<i>Q. chrysolepis</i>	Canyon live oak	6 inches
<i>Q. douglasii</i>	Blue oak	6 inches
<i>Q. garryana</i>	Oregon oak	6 inches
<i>Q. kelloggii</i>	California black oak	6 inches
<i>Q. lobata</i>	Valley oak	6 inches
<i>Q. parvula</i> var. <i>shrevei</i>	Oak	6 inches
<i>Q. wislizeni</i>	Chaparral oak	6 inches
<i>Salix exigua</i>	Narrow leaved willow	6 inches
<i>S. laevigata</i>	Red willow	6 inches
<i>S. lasiolepis</i>	Arroyo willow	6 inches
<i>S. lucida</i> ssp. <i>lasiandra</i>	Shining willow	6 inches
<i>S. scouleriana</i>	Scouler's willow	6 inches
<i>S. sitchensis</i>	Sitka willow	6 inches
<i>Sambucus callicarpa</i>	Red elderberry	10 inches
<i>Sequoia sempervirens</i>	Coast redwood	10 inches
<i>Taxus brevifolia</i>	Pacific yew	10 inches
<i>Torreya californica</i>	California nutmeg	10 inches
<i>Umbellularia californica</i>	California bay	10 inches

ATTACHMENT 2 - Ordinance #3342

MARIN COUNTY OAK WOODLAND VOLUNTARY MANAGEMENT GUIDELINES

The following recommendations are being given to private landowners for determining how they can best manage their oak woodlands. These guidelines are voluntary and general in nature. The recommendations are not in any particular order of importance and should all be considered when reviewing a specific piece of property. Landowners are encouraged to plan their harvest using the University of California Integrated Hardwood Management Program information and the other listed resources for specific assistance.

1. When Harvesting Oaks for Fuel or Range Improvement, Plan Your Harvest to:
 - a. Maintain an average leaf canopy of 30 percent or more of single stemmed oaks and 15% or more of multi-stemmed oaks.
 - b. Retain trees of all sizes and species represented on site, including specimen age and heritage size oaks of all species.
 - c. When safety permits, leave old hollow trees and those actively being used for nesting, roosting, or feeding.
 - d. Where low fire risk and aesthetics allow, pile limbs and brush to provide wildlife cover.
 - e. Where commercial or extensive harvest is being contemplated, seek professional advice from such resources as the Marin County Forester, UC Cooperative Extension (Farm Advisor), USDA Soil Conservation Service (SCS), California Department of Forestry and Fire Protection (CDF) and private consultants.

2. When Building Within Oak Woodland:
 - a. Cluster houses to preserve wildlife corridors and habitats.
 - b. Protect existing oaks during construction.
 - c. Avoid root compaction by limiting heavy equipment within the dripline.
 - d. Carefully plan roads, cuts and fills, building foundations and septic systems to avoid damage to tree roots.
 - e. Avoid landscaping which requires or allows irrigation within ten feet of the trunk of an oak tree.
 - f. Consider replacing trees whose removal during construction was unavoidable. Replacement trees should be predominantly native species that are not highly susceptible to Sudden Oak Death Syndrome or other disease.

3. Fire Protection Process:
 - a. Prune branches and limbs of single stemmed oaks, to 8' above groundline, near structures and fuel breaks, providing this does not remove more than 33% of the live crown.
 - b. Prune lower limbs and remove dead limbs on desired brush species to reduce the "fire ladder" effect.
 - c. On multi-stemmed oaks, reduce the number of stems to 2-4 per clump and prune to 10 feet above ground level.
 - d. Emphasize single stemmed oak species.
 - e. Remove brush from under the dripline of desired and residual trees.
 - f. Remove debris from the base of the residual trees.
 - g. Remove, push aside, burn, and pile away from desired species any unwanted plants on the fuelbreak.
 - h. Control unwanted sprouts by manual, biological, mechanical, chemical means or burning. For further information see publication "A Property Owners Guide To Reducing Wildfire Threat."

4. Disposal of unwanted vegetation:
 - a. Utilize unwanted vegetation if at all possible for mulch, co-generation, fuelwood, etc.
 - b. Unutilized material should be piled and burned.
 - c. Burn dry material, with good ventilation, to reduce the smoke production.
 - d. Burn on "burn days only" in compliance with Air Pollution Control District Guidelines
 - e. Burning should only be done with a burn permit from the California Department of Forestry and Fire Protection.
 - f. Use prescribed burning when possible.

OAK WOODLAND MANAGEMENT RESOURCE AGENCIES

Assistance on developing an Oak Woodland Management Plan is available from the following local agencies

California Department of Forestry & Fire Protection
University of California Cooperative Extension
California Department of Fish & Game
USDA Soil Conservation Service
Marin County Agricultural Commissioner
Marin County Board of Supervisors
Marin County Farm Bureau
Marin County Forester
Marin County Community Development Agency
United States Department of Agriculture
California State Board of Forestry
California Native Plant Society
University of California Integrated Hardwood Management Program

OAK WOODLAND MANAGEMENT PUBLICATIONS

University of California Cooperative Extension, Marin County
1682 Novato Blvd.
Novato, CA 94947
(415) 899-8620

A Planner's Guide to Oak Woodlands

Includes planning guidelines and alternatives, with a section on oak ecology, 94 pp. \$10.00.

Living Among the Oaks

An Oak management guide for homeowners, 8 pp. Free.

Wildlife Among the Oaks

Recommendations for managing woodland wildlife, 16 pp. Free.

How to Grow California Oaks

Includes detailed information relevant to restoration, 4 pp. Free.

Preliminary Guidelines for Managing California's Hardwood Rangelands

Management recommendations for landowners and resource managers, 96 pp. \$5.00.

Harvesting Firewood for Sustained Yield on Oak Rangelands

Assessment methods and harvesting recommendations, 32 pp. \$3.50.

Oaks 'n' Folks

Integrated Hardwood Range Management Program newsletter with articles on scientific, social and economic issues. Free.

Quercus

An Integrated Hardwood Range Management Program newsletter on planning for oak woodlands. Free.

California Oak Foundation
1212 Broadway, Suite 810, Oakland, Calif. 94612; (510) 763-0282

Oaks of California

Broad overview of the ecology and history of California's oaks. 184 pp. Hardcover. \$28.95.

Compatible Plants Under and Around Oaks

Landscaping information and plant checklist. 69 pp. \$10.00.

California Oaks

The newsletter of the California Oak Foundation. Free to members (membership \$25.00 per year)

California Native Plant Society

909 12th Street, 116, Sacramento, Calif. 95814; (916) 447-2677

Oak Action Kit

Selection of publications and resources on preservation and conservation of Oak habitat. Three-ring binder, \$15.00.

DEFINITIONS

AVERAGE LEAF CANOPY PERCENTAGE

The percent of an area covered by the shadow of standing oak trees, in leaf, when the sun is directly overhead. Each area is to be evaluated and measured separately and solely on its own growth without regard to other surrounding area. Only area with oak tree growth is to be considered in the equation.

OAK

The following terms:

- Oak Woodland,
- Oak Woodland Habitat,
- Oak-grass Savanna,
- Oak Rangeland,
- Hardwood Rangelands,
- Oak Range,
- Hardwood Range.,

are synonymous and interchangeable and mean, in a general sense, all the oak-grass woodland areas throughout California. Specifically, as regards this document, these terms refer to those oak-grass woodland areas that have at least 10 percent tree canopy cover and deciduous oaks including blue oak, valley oak, black oak, oracle oak, Oregon white oak and the two important evergreen oaks-canyon live oak and interior live oak. For a more complete and in depth definition and further clarification refer to "Preliminary Guidelines for Managing California's Hardwood Rangelands, Publication 21413, University of California Cooperative Extension, Division of Agricultural and Natural Resources, 1985 edition."