VEGETATION ASSOCIATION: GROVE/ORCHARD

MAPPED SUBASSOCIATIONS: None

DATA CHARACTERIZATION

Because grove and orchard farms are registered with the County and State, and information regarding land use is stored with the County by parcel, the mapping of this Vegetation Community is considered to be very accurate.

BIOGEOGRAPHY

Groves and orchards are planted in human-inhabited areas throughout the world, where climatic conditions are appropriate.

RANGE AND DISTRIBUTION WITHIN WESTERN RIVERSIDE COUNTY

The largest area of grove/orchard is in Santa Rosa East between Gavilan Mountain and Mesa de Colorado. Smaller tracts of grove/orchard are mapped in the Pauba Valley east of Temecula (Long Valley, Buck Mesa, Glen Oak Valley), east of Hemet, in Temescal Valley, on the Gavilan Plateau, southwest of Lake Matthews, in south Corona and El Cerrito, in Eagle Valley, Arlington Mountains, Woodcrest, and Highgrove. Small and scattered mappings include areas around Sage, in the Lewis and Reed Valleys between Anza and Cahuilla Mountain, in the Elsinore Mountains west of Wildomar, in the Antelope Valley and El Cariso, in the Lakeview Mountains and in the community of Nuevo, and in Moreno Valley, Banning, and Beaumont.

VEGETATION CHARACTERISTICS

Agricultural groves are generally open and of single species with often low bushy trees which result from pruning (Schultze 1988). The undergrowth usually contains low-growing grasses and other herbs but is mostly composed of bare ground (Schultze 1988). Aside from agricultural purposes, groves can also be planted as windbreaks, for aesthetic purposes or as firewood or lumber (Holland and Keil 1995). Eucalyptus *(Eucalyptus* spp.) has been planted widely in California for windbreaks, aesthetic purposes, and for firewood and lumber (Holland and Keil 1995). These stands shade the ground and litter the soil surface (Holland and Keil 1995).

Plantations of orchard crops may include walnuts *(Juglans* spp.), plums *(Prunus domestica)*, almonds *(Prunus dulcis)*, peaches *(Prunus persica*), and apples *(Malus sylvestris)* (Holland and Keil 1995). Grapes *(Vitis vinifera)* are commonly grown in Riverside County; it is the second largest agricultural commodity (CDFA 1999). Other leading grove/orchard producing commodities are grapefruit, avocados *(Persea* spp.), and lemons, in that order (CDFA 1999). According to 1992 statistics, 21 acres of almonds, 199 acres of apples, 42 acres of apricots, 8,462 acres of avocados, 117 acres of cherries, 13 acres of figs, 11,708 acres of grapefruit, 136 acres of kiwi fruit, 5,478 acres of lemons, 54 acres of limes, 125 acres of nectarines, 125 acres of olives, 19 acres of pecans, 12,813 acres of oranges, 189 acres of peaches, 2 acres of pears, 39 acres of pistachios, 51 acres of plums, 598 acres of tangelos, 2,079 acres of tangerines, 43 acres of walnuts, and 18,253 acres of grapes were planted in Riverside County (California Agricultural Statistics Service 1993b).

PHYSICAL ENVIRONMENT

Orchards and groves may be found on flat alluvial soils on valley floors, in rolling hill areas, or relatively steep sloped areas (Schultze 1988). Most orchards are irrigated and occur in non-mountainous areas to avoid frost damage (Schultze 1988).

ECOSYSTEM PROCESSES

Agricultural cultivation practices are the biggest influences to plant growth. Typically, the desired species are planted as seedlings and are managed until they are grown small to medium size (Schultze 1988). Old and/or damaged trees are usually individually replaced although sometimes the entire plot is replaced or abandoned (Schultze 1988).

Other processes which influence these areas are a result of the physiographic structure. Typically, grove trees shade the ground and draw nutrients and water from the soil thus influencing plant communities and wildlife interactions (Holland and Keil 1995). Allelopathic chemicals in the leaves of eucalyptus trees, for example, inhibit understory growth (Holland and Keil 1995). The chemicals typically are transferred to the soil via fog-drip or rainwater (Holland and Keil 1995).

THREATS

No threats to grove and orchard production have been identified in the literature review conducted for this account. It can be stated that the main threat to grove and orchard production is economic competition for land.

LITERATURE CITED

California Agricultural Statistics Service. 1993b. California Fruit and Nut Crop Statistics 1983-1992. County Data 1991-92. Sacramento, California.

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