



Why plant acorns? California oaks are adapted to withstand our long dry summers. Long before the shoot emerges from the ground, the acorn germinates and sends a long root tunneling down through the soil. By the time the shoot emerges, the root may have grown two to three feet long. The long taproot produces fine side branches along its length. The long taproot is able to absorb moisture from deep in the soil, and this helps the young seedling survive our long, hot summers without supplemental irrigation. Also, food reserves stored in the roots allow the oak to send up a new sprout if the shoot is killed by drought stress or fire or consumed by animals.

When oaks are grown in pots, the taproot becomes distorted. Oaks transplanted from pots typically need at least some irrigation during the first summer in order to survive. Even with irrigation, survival of root-bound oaks grown in pots is typically poor in low maintenance open space plantings.

FALL PLANTING IS LARGEST YET

About 50 volunteers, including members of Vacaville Cub Scout Packs 180 and 975 and the Winters 4-H, participated in VTF's November 19, 1994 planting at the Peña Adobe Hill open space. Volunteers planted at least 225 sites with buckeye and 525 sites with valley, blue, or live oak. Planters also scattered 2.5 lb of California poppy seed.

The City of Vacaville Community Services Department made the 60 acre open space location available. The city has discontinued grazing cattle on the site, so we were able to plant without installing protective wire cages around each site. VTF hopes to involve local school classes and others in monitoring the success of the planting.

VTF wishes to thank all those who participated in this planting and past plantings for their contributions to the future of Vacaville. Thanks are also due to those that collected acorns, and to the California Medical Facility at Vacaville, Alamo Nursery, Pacific Hardware, and local McDonald's Restaurants for their contributions to the project.

Previous plantings are doing well

We surveyed our three previous oak plantings in August 1994. All were planted with acorns on grazed city open space lands, and individual planting sites are protected with special cages.

Hidden Valley open space was planted with valley oak acorns in 1989. The tallest trees are 8.5 feet tall. Seedlings that were not protected from cattle grazing have nearly all died. Live trees are present in 79% of the original 240 caged sites. Sites that were planted without mulch are on average shorter and have a lower survival rate than those that were mulched. Several sites have been destroyed due to vandalism associated with hill sliding.

The **Brown's Valley School** and **Woodcrest** open space parcels were planted in 1992. Most of the 100 sites were planted with valley oak, but some blue oak sites were also included. Overall survival is about 96%. Cages at the Woodcrest parcel need

maintenance before cattle are put on again.

We planted 115 sites with seeds of three species at **Lagoon Valley 1** in 1993. Survival is 78% for valley oak, 85% for live oak, and 93% for California buckeye. Frequent inspections and maintenance have been required to keep ahead of damage caused by cattle.

Most of the blank sites have been replanted at these locations, but survival numbers are based on the original plantings. Survival and growth are quite encouraging, especially since rainfall has generally been below average.

WANT TO GET INVOLVED?

VTF is looking for people or groups that would like to monitor or maintain plantings, organize plantings, apply for grants, help with educational activities, etc. If you are interested, call Ted Swiecki at 448-0230 or Jerry Hill at 446-1239.