



Turn An Acorn Into An Oak: How to Leave a Natural Legacy

By Betty L Young

For many of us, oaks are an iconic part of California landscapes. Would you like to take a positive hands-on approach to assuring that there will be majestic oaks for your grandchildren to enjoy? In doing so you will also support 350 species of insects, birds, amphibians, reptiles, and furry mammals that have evolved with and need oaks for their survival. You will be cooling creeks, building soil, improving groundwater, and helping to sequester carbon dioxide and cool the planet. Most of all, you will have fun and reconnect with a natural world that nourishes and gives hope.

In much of California, there is little natural regeneration of oaks because acorns fall on asphalt, seedlings are eaten by cattle or mowed, or trees are over-watered by homeowners. How can we compensate for this loss that all of us have caused? If you own or have access to a piece of property at least 20' x20' that is not watered in the summer, you have a place to grow an oak. With the blue and scrub oaks of the hottest hillsides, the black and valley oaks on the flats and valleys, and the coast live oaks of coastal regions, there is an oak for most parts of California.

The best way to grow an oak is to collect acorns right where you want to grow your oak, and plant them directly into the soil. Planting acorns from trees near the property you will be planting ensures the new oak will be adapted to the specific local conditions on the site in which they grow. If you buy an oak from a nursery, it may be from an acorn from a distant part of the state, genetically very different, and possibly unsuited to your local conditions. Collecting from as many trees as possible near you will maintain locally-adapted genetic diversity and nurture a diverse population of oaks.

To collect acorns and plant them right where you want them, follow these easy steps:

COLLECT ACORNS:

When are the acorns ripe? This will vary due to how hot summer was. Generally you will find: Tan oaks (*Lithocarpus densiflorus*) mid-August to mid-September. Blue oaks (*Quercus douglasii*) late August to mid-September. Black oaks (*Quercus kelloggii*) late August to early October. Valley and Oregon oaks (*Quercus lobata* and *garryana*) mid-September to late October. Coast live oaks (*Quercus agrifolia*) late September to late October. Be sure you have permission from the property owner. You cannot collect from any park without permission.

1. Take a bucket or sack with handles.
2. Wear long pants, hat, sunscreen and boots. Bring water. It's the hottest time of year.
3. It's best to pick the acorns right from the tree, if you can reach them. It's OK if they are still green. This way they are clean and have not dried out.
4. They are ripe when they twist easily out of the cap. Hold the cap in one hand, the bottom of the acorn in the other, and twist gently. If it comes out without tearing it's ripe; if not, come back a week later and try again.
5. Once acorns have fallen they dry out quickly, but may still be good if they are dark brown and without ridges. Go ahead and pick them up.
6. Sometimes if they are at the right stage, you can put a tarp under the tree and hit the branches with a stick. Theoretically the acorns fall on the tarp, but usually you get branches, leaves, and twigs --everything but acorns.
7. Discard any cracked acorns. If you see a dark spot on the acorn, this is from an insect depositing its egg inside. The egg hatches and the larva eats the inside. They eat slowly and sometimes you can plant and get the acorn sprouted before the larvae consume the embryo of the baby tree in the point of the acorn.
8. Put your acorns in a bucket of water. Discard the ones that float; they are dried out and probably dead. Just throw them back out for food for local wildlife.

9. Make a household bleach solution in a bucket of water with 1 teaspoon bleach per gallon of water. Take the “sinkers” and put in another bucket of bleach water. Let stand 30 seconds. This will kill any fungal spores the acorn may have picked up from the air or ground. You know what happens to anything in the back of your refrigerator for two or three months --by putting in a bleach solution, you are killing the spores that would cause the acorns to mold or carry diseases to the emerging seedling root.
10. Rinse acorns in plain water.

STORE ACORNS

Coast live oak, interior live oak, and black oak all require 60 days cold treatment to induce germination. Blue oak, valley oak, and Oregon oak do not need a cold treatment but germination can be delayed by storing in the fridge. Otherwise, they will sprout as soon as they get wet. However, they have a better chance of survival if they are planted after the rains are steady; if planted as soon as collected, long delays between rainfall means they will probably dry out and die.

1. Label a Ziploc type bag, with:
 - a) Species name,
 - b) Area of collection,
 - c) Date collected,
 - d) Date placed into the refrigerator.
1. Put acorns in the Ziploc bag and add enough dry perlite, so that each acorn is in contact with perlite. This absorbs any surface moisture that would carry fungus.
2. Shake the bag to distribute the perlite.
3. Mark your calendar on the day you collected and put in the refrigerator.
4. Mark your calendar for two months later (for black oak and coast live oaks).
5. Check the bags every couple of weeks. Discard any acorns that are starting to mold.

TO PLANT

When two months have passed and the rains have started, it's time to plant. Planting in the winter allows the root of the oak to become established before the leaves emerge and start using water. Before the first leaves emerge in the spring, the root is often 30-40" deep. They have to be in California, to find water in the summer.

1. Find an appropriate spot to plant. Be sure the landowner agrees, if it's not your property.
2. Pull or scrape off all grass in a 3' by 3' area. If the grass is left, it consumes any available water before it can get down to the seedlings tender developing roots.
3. Dig a 4-6" deep hole. If you have gophers, use a gopher basket or other protection.
4. Put a little slow release fertilizer or bone or blood meal on the bottom of the hole. Add a little soil to cover the fertilizer, and then add three acorns. Just lay them on their sides and then fill it back with the soil.
5. Walk 20' away and do it again.
6. Water with at least a quart of water to settle the soil around the acorns. Be sure they are still covered.
7. Mulch for 3' around the acorns with mulch that is at least 3" deep. You can use organic mulch, cardboard, or landscape fabric cut in a 3' square. Cut a slit in the middle for the oak to emerge. Pin each corner and at the slit.
8. If you have deer or voles, protect the oak with screen. If you have cows, use t-bar fence posts to hold the screen and protect from the cows. A sparse pile can provide good protection, while also providing refuge to birds.
9. Any time, until the end of spring that there is a 3 week interval between rains, give your acorns or oaks a drink – a couple of quarts.
10. By early March or April you should see your baby oaks emerge. If more than one acorn sprouts, carefully pull or cut off the extra sprouts below soil level.

Now you have done your part in keeping our heritage alive for future generations.

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