Redwood National and State Parks

Redwood National Park
Jedediah Smith Redwoods State Park
Del Norte Coast Redwoods State Park
Prairie Creek Redwoods State Park

Redwood Burl

Coast redwood with burls- Though tumor-like in appearance, laying dormant within these knobby growths is the future of the coast redwood forest.

What Is Burl?

Burl is the knobby growth most commonly seen at base of some coast redwoods, though it can also be found high in the canopy as well. Burl is a woody material full of unsprouted bud tissue. It serves as a storage compartment for the genetic code of the parent tree. If the redwood falls or is damaged, the burl may sprout another redwood tree known as a clone.

Black Market Demand

It is illegal to harvest burl within Redwood National and State Parks.

The unsprouted bud tissue within burl produces a complex and uniquely patterned wood grain. In recent years, park managers have seen an increase in burl theft. This disturbing trend, known as burl "poaching," directly harms and can potentially kill these magnificent trees.

The removal of burl can allow disease and infection to enter the tree. This adds stress to trees already stressed from growing in sub-optimal locations such as roads, where burl poaching is most frequently concentrated. Further, when large quantities burl and cambium are removed, the tree may become "girdled." Once girdled, a tree losses the ability to heal itself, resulting in canopy die-back and death.

-Please be an informed consumer. Ask the seller where their burls come from. Don't buy it if you don't know.

-Please report any suspicious wood poaching activity in Redwood National and State Parks to the RNSP Tip Hotline: 707-465-7353, or by dialing 911.

Poached burl- Disturbing evidence of burl illegally cut from the base of a coast redwood in Redwood National and State Parks. This act of theft may kill this ancient giant.

Burl Development

Coast redwoods begin to develop burl as seedlings. As the tree grows, the dormant stems within the burl enlarge, giving the burl a bulbous, knobby look. Burls generally emerge in a bud-collar near the base of the tree, but may develop higher on the trunk and limbs as well. Regardless of the location of the burl, the unsprouted bud tissue serves a valuable evolutionary tool for survival. When a tree is stressed by drought, fire, wind damage or even old age, sprouts containing the exact genetic make-up of the parent tree will begin to develop from the burl. Burls ensure the redwood tree's genetic future.

Family Circles

Occasionally, an almost perfect circle of redwood trees grows in the forest. Known as fairy rings, they are evidence of several bud-collar sprouts, normally of a similar age, encircling a long-fallen parent tree. Redwood trees are unique cone-bearing trees because they reproduce via burl and seed. If a redwood falls or is otherwise damaged, the burl may begin to sprout from the trunk or branch it developed on, sharing or taking over the established root system of the parent tree. Staying true to its name, the adaptations of Sequoia sempervirens (ever-living Sequoia) seem to bend time as it continues to prove itself one of the earth's most tenacious survivors.

Not Just Redwood Burls

Other burl-like growths can form on redwood trees. These growths are normally scar tissue, formed as a redwood regenerates its protective bark following injury, such as fires, cuts, or breaks. The healing scars will not sprout and do not contain the telltale buds that mark the bottom of a true burl. Other plant species in the redwood forest also grow and regenerate from burls. These include big-leaf maple (Acer macrophyllum), bay laurel (Umbellularia californicum), rhododendron (Rhododendron macrophyllum), and huckleberry (Vaccinium parvifolium).

Forest of the Future

A walk through the forests of Redwood National and State Parks offers a glimpse at a seemingly timeless ecosystem. Redwood burls, in their twisted, knotted forms, offer the potential for coast redwoods to grow and thrive for millennia. If the environmental health of the redwood forest is carefully protected, the burls you observe at Redwood National and State Parks may become the coast redwood forest of the future.

Report Wood Poaching

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