

TANOAK-GOLDEN CHINQUAPIN-SUGAR PINE

*Lithocarpus densiflorus-Castanopsis chrysophylla-Pinus lambertiana*

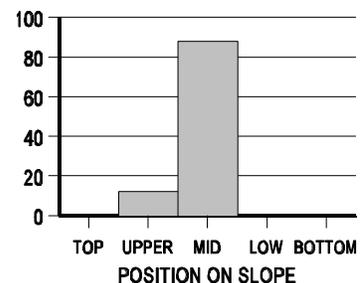
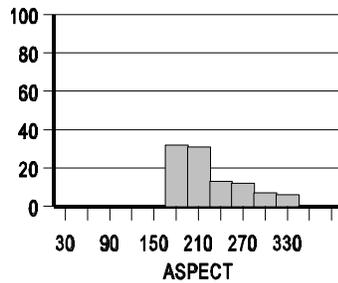
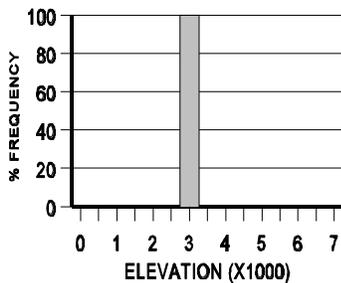
LIDE3-CACH6-PILA (N=8; BLM=8)



Distribution. This unusual Association is found only in the Grants Pass Resource Area, Medford District, Bureau of Land Management. It seems to be confined to Township 35 South, Range 9 West. It may be found elsewhere on high elevation, south aspects, if the soils are ultramafic or basic. Validation of its presence in other townships is welcome.

Distinguishing Characteristics. This Association has only been found in a limited area. Average elevation is 3600 feet. Sites are located between 3200 and 3800 feet. Aspects are usually south to southwest and sites are associated with mid to upper slope topographic positions. Ultramafic parent material, and associated flora, such as huckleberry oak and coffeeberry characterize the Association.

Soils. Parent material is usually a mix of granodiorite, ultramafics, and mixed volcanic. Samples occur on an *aureole* (an area where granodiorite was intruded



through serpentine) and rock types are well mixed. Average depth is at least greater than 14 inches, based on nine samples. Textures are sandy loams. Rock fragment content averages 73 percent, most of which is cobbles and stones (41 percent).

Environment. Elevation averages 3600 feet. Slopes average about 37 percent. Sites occur predominately on southwest aspects, but occasionally may occur on northwest aspects. Average annual temperature is a cool 46 degrees F (lowest for the Series) and average annual precipitation is 100 inches.

Vegetation Composition and Structure. Total species richness, very low for the Series, is 14. Although this Association is limited in extent, ultramafic sites usually have a high herbaceous diversity. Herbs are often ephemeral and difficult to find, particularly where soil surface moisture is quickly depleted. Diversity estimates are subject to seasonal variation, and a one time sample, if taken late in the season, may be inaccurate. Jeffrey pine dominates the overstory, but tanoak regeneration is much more abundant in the understory. Typical ultramafic flora evenly dominates the shrub layer. Dwarf Oregongrape is the least tolerant of the calcium/magnesium imbalance characteristic of ultramafic soil, and is rarely found with cover greater than 5 percent. The manzanitas and bracken may also partly reflect repeated low intensity disturbance.

Common name	Code	Constancy	Cover	Avg. Richness
<u>Overstory trees</u>				2
Douglas-fir	PSME	89	16	
Jeffrey pine	PIJE	56	13	
<u>Understory trees</u>				5
Tanoak	LIDE3	89	35	
Golden chinquapin	CACH6	89	35	
Sugar pine	PILA	89	11	
Jeffrey pine	PIJE	78	2	
Douglas-fir	PSME	56	3	
<u>Shrubs</u>				3
Greenleaf manzanita	ARPA6	89	14	
Sadler oak	QUSA2	67	24	
Whiteleaf manzanita	ARVI4	67	22	
Huckleberry oak	QUVA	67	16	
Pinemat manzanita	ARNE	63	15	
Red huckleberry	VAPA	56	15	
Coffeeberry	RHCA	56	4	
Salal	GASH	50	26	
Dwarf Oregongrape	BENE2	38	2	
Western Azalea	RHOC	11	10	
<u>Herbs</u>				4
Braken	PTAQ	89	2	
Common beargrass	XETE	67	4	
Whitevien pyrola	PYPI	67	4	