

# Natural Vegetation

Purpose: to acquaint the student to the distribution of native vegetation within California.

I. Explain the difference between native and introduced plant types. Historic implications see VI. below.

II. Relationship between Vegetation and

A. Topography (PPT.- windward vs. leeward - Vertical zonation.

B. North-south climatic change due to latitude. (PPT & Insolation etc.)

III. Amounts of vegetation

A. Only 14% of Cal. is urbanized or cultivated.

B. High ranking in lumber and range cattle production.

IV. Types of vegetative cover.

A. Biomes - Terrestrial Ecosystems p. 143 Fig 7-1

1. Forest - Ample soil water and heat. Crown shades ground.

2. Woodland- canopy coverage 25-60%

3. Savanna Woodland - widely spaced trees with grass.

4. Parkland or grassland- Mostly grass; few if any, trees.

Moderate shortage of soil water; adequate heat.

5. Desert- extreme shortage of soil water; adequate heat.

6. Tundra- Insufficient heat.

7. Riparian vegetation = along water courses, mainly trees.

B. General Vegetation Groups Map Handout

1.0 Coniferous forests - 21 % of area in California.

a) briefly explain coniferous vs. deciduous trees

b) Name types 1,2,3,5 needle pines. Others like juniper

1) Also Redwoods (*Gigantia* & *Sepervirons*) only grow in California. "Largest" and tallest trees.

2) Bristle Cone Pine = oldest living thing. Located in the White Mtns.

c) Douglas Fir = most prolific.

1.1 Coniferous Woodland - 3 % of area in California.

2. Oak Woodland - 11% of area in California.

Name types of oaks deciduous vs. evergreen

3. California Prairie - 22% of area in California.

4. Chaparral - 9% - (dwarf) forest biome, scrub oak, Manzanita.

5. Sagebrush - 8% - (semi) desert biome, less dense than #4

6. Desert Shrub - 25% - much bare ground xerophytes & creosote Bush

7. Marsh Grass - less than 1% of area in California.

8. Barren - 1% incl. Tundra not usable, high mountains.

9. Littoral - 1% Shore line.

V. Transects and distribution Miller P. 148 Fig. 7.6 Vertical Zonation

A. Transects show the vertical zonation well and several transects show N-S chg. caused by Latitude differences.

B. Distribution - to show patterns of arrangement of plants.

VI. Effects of Introduced Species

A. Takeover and destruction of native species.

B. Change of "landscape" - eucalyptus as the example

C. New species of grasses better than native grasses for animal grazing. Some species introduced accidentally.

D. Climatic controls still limit range of introduced species.

i.e. freezing and eucalyptus, ice plant etc.

**End**