

What is “Maritime Chaparral”?

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“Maritime” generally refers to climate

Maritime Climate

- Coastal location
- Winters cool
- Summers warm
- Small daily temperature range
- Small seasonal temperature range
- High relative humidities

Continental Climate

- Inland location
- Winters cold
- Summers hot
- Large daily temperature range
- Large seasonal temperature range
- Low relative humidities

Dallman, P.R. 1998. Plant life in the world's Mediterranean climates.

Topography shapes the interplay between maritime and continental climates. Elevation and terrain generate a diversity of microclimates within a given region or landscape.



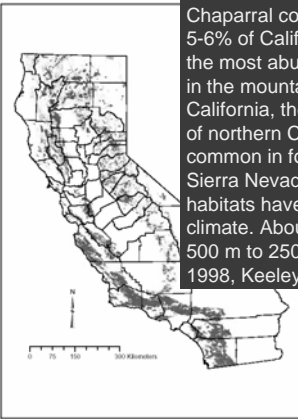
Chaparral: Evergreen sclerophyllous shrubland characteristic of Mediterranean-type climates (winter rain, summer drought)

Montana Del Oro SP
 San Luis Obispo



Pickeringia

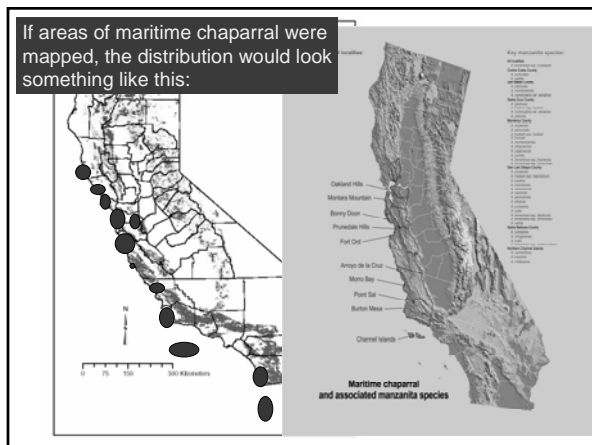
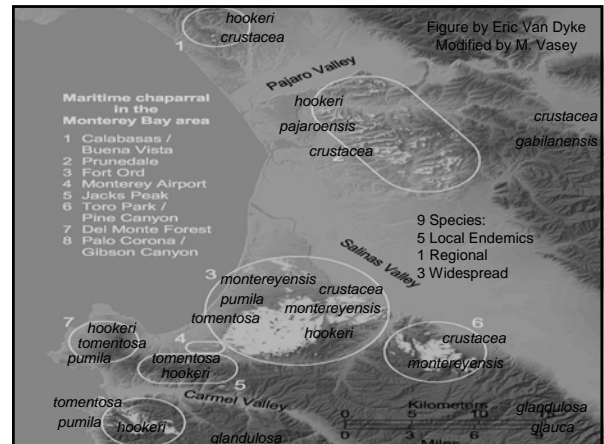
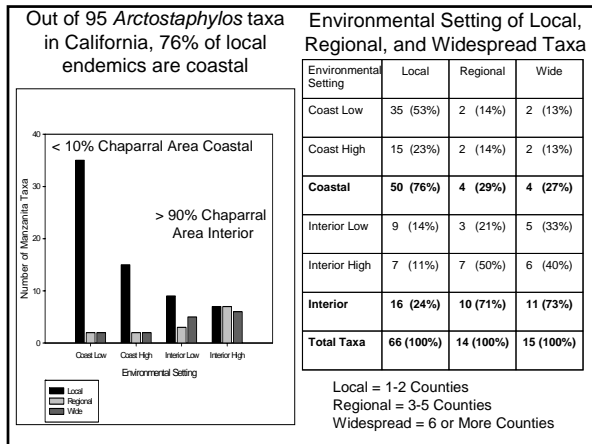
Dendromecon



Chaparral covers about 5-6% of California and is the most abundant vegetation in the mountains of southern California, the interior coast range of northern California, and it is common in foothills of the western Sierra Nevada. Most of these habitats have a relatively “continental” climate. About 95% ranges from 500 m to 2500 m in elevation (Dallman 1998, Keeley 2007).

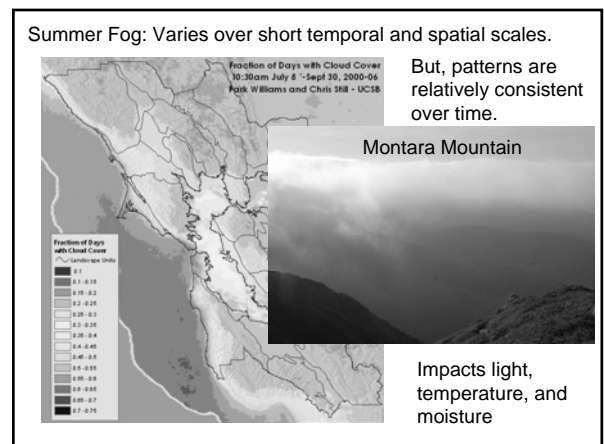
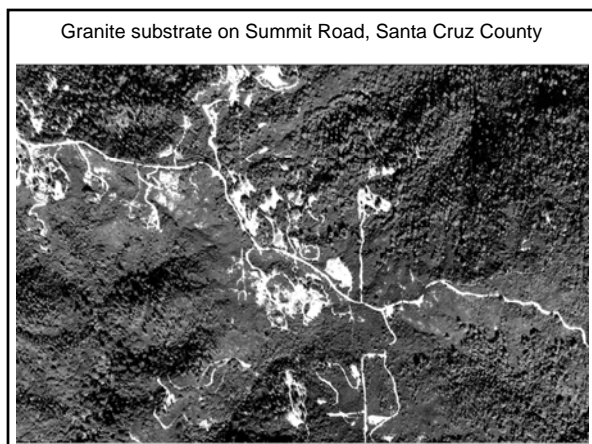
So, what about maritime chaparral?

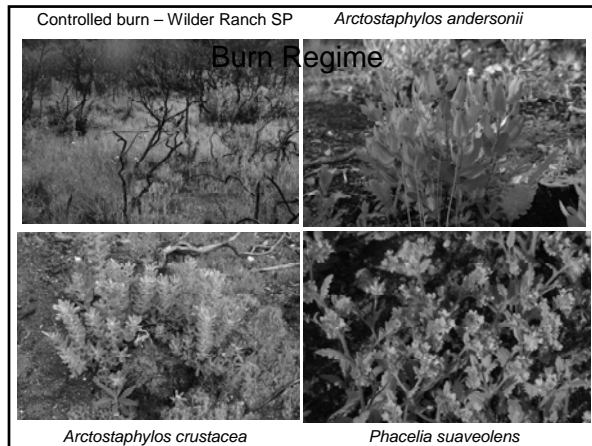
- Relatively new concept – introduced ~30 years ago (Griffin 1978).
- Occurs in isolated, low elevation stands along Pacific coast from northern Baja California to southern Mendocino County, California.
- Increasingly recognized for numbers of local endemics and species richness (high biodiversity)
- Along central California coast, at increasing risk of extirpation (and extinction) from human land use practices.



Characteristics of Maritime Chaparral

- Occurs on oligotrophic (nutrient-poor) soils (sandstones, shales, granites, dunes, serpentines, etc.).
- Is influenced (more or less) by coastal climate and particularly summer fog (coastal cloud) patterns.
- Reflects dynamic vegetation mosaics shaped over time by wild fire regimes.
- Occurs as “meta-populations” in evolutionary time.





Conservation Challenges

- Protect the landscape template of suitable soils.
- Track climate change and potential impacts on the summer fog regime.
- Adjust fire regimes to land use and climate change while managing the urban/wildland interface (buffers).
- Provide for long-term connectivity & population dynamics (e.g., restoration?).
- Create socially acceptable, flexible and adaptive land use practices that maintain ecosystem resilience and human well-being (sustainability).

