

Chaparral Display

Chaparral is the most widespread plant community in Southern California which forms dense impenetrable thickets of shrubs 4-8+ ft. high. Most of these shrubs have similar adaptive growth forms with deep roots and hard, waxy leaves.

Chamise, Buckwheat, and other tough leaved plants comprise the Chaparral community. Sun-baked on south-facing slopes, these hearty plants endure long, dry summers. Birds and small mammals benefit from protective cover, as well as the seeds and fruits Chaparral plants provide.



Plants

Hairy-leaf Ceanothus (*Ceanothus oliganthus*)



- Blue/purple dense flower head, flowering Feb. to April. Can hear the seed capsule bursting open in the summer along the Hidden Trail.
- Fertilizes the soil, nitrogen fixing roots
- Regrows from seed, seeds stimulated by fire
- Usually found on North facing slopes

- This ceanothus like all ceanothus' flower heads, fresh or dried, form a lather when rubbed with water.

Mountain Mahogany (*Cercocarpus betuloides*)



- Important fertilizer of Chaparral soils
- Important deer food
- Has monkey tailed seeds that helicopter in the wind. In late summer, the monkey tail give a silvery cast to the plant that stand out in the Chaparral

- The hard wood was used as digging sticks, for spear and arrow shaft. Bows could be made from Blue Elderberry.

Sugar Bush (*Rhus ovata*)



- Large shiny leaves, folded like a taco when in the direct sun.
- Quarter inch tart tasting red seed capsule coated with a flesh, that could be used to sweeten water drink.

- Like most Chaparral plants, photosynthesis in the summer goes to supporting new roots instead of new leaves. Only when water is abundant new leaves will grow. Unlike the shallow rooted stages, it is part of their adaptive strategy to retain their leaves through the summer.
- If this bush was seen by early citrus growers, they knew it was too cold for a citrus grove.

Toyon (*Heteromeles arbutifolia*)



- Red berries important food source birds, squirrels, foxes, coyotes, bears and Native Americans
- Usually found on North facing slopes, or arroyo (stream)
- Once extensively used for Holiday decorations, there still exist a fine for gathering it in order to protect it.
- When young growth is present, deer will browse Toyon, Mountain Mahogany and Ceanothus but not generally Manzanita.

California Sagebrush (*Artemisia californica*)



- Very aromatic leaves
- Member of sunflower family
- Used by Native Americans to disguise human odor from deer when hunting; by miners to ward off fleas; by cowboys as well (aka Cowboy cologne)
- Loses many of its leaves in the summer
- Shallow rooted

Chamise (*Adenostoma fasciculatum*)



- It's not Chaparral, if Chamise isn't around somewhere.
- Chaparral eventually will become dominated by Chamise without intervention of fire.
- In comparison to Ceanothus, it lives much longer.
- Can establish itself in drier and shallower soils
- Flowering May to June, cluster of small white flower at tip of branches

Coyote Brush (*Baccharis pilularis*)



- Large bush with succulent looking leaves
 - Leaves have smooth or usually toothed edges, wider at the end, leaf about half inch long
 - Small white flowers, blooms in December
 - Not as deep rooted, nor as leathery leafed as other Chaparral plants, but its evergreen leaves are proof of its drought resistance
- More like a disturbed area opportunist
 - One study found 291 species associated with this plant (Tilden, 1951)

Black Sage (*Salvia mellifera*)



- Aromatic leaves used to protect stored Native Americans acorns.
- Member of mint family, leaves roughly textured
- Multiple blue flower whorled clusters, widely spaced, surrounding flower stem
- A favorite flower of the Black Carpenter Bee, as well as visited by many other insects and hummingbirds. Birds like the seeds.

California Buckwheat (*Eriogonum fasciculatum*)



- Flowers March to November, 2-3' high
- Pink white flower turns red brown, one of the reasons why Southern California hills look brown late in the summer
- Very common, everywhere in the foothills of the San Gabriel Mountains
- Tiny seeds were “desperation” food for Native Americans or were used as a seasoning
- Probably the best plant to attract feeding butterflies (like Acmon Blue) and makes for a very fine honey

Yucca (*Hesperoyucca whipplei*)



- A succulent, the thorn leaf tip when pulled back forms a needle and thread
- Fibers from the leaf used to make rope
- Stems roasted for a sweet pulp
- Flowers could be eaten, but not very tasty
- Yucca and Yucca moth are co-dependent. Moth necessary for flower fertilization, and only this genus is host to the Yucca moth.
- Flower stem used by Carpenter Bees.

Birds

Western Scrub-Jay (*Aphelocoma californica*; Painted on back wall)



- Distinguished by deep-blue above and brown back patch, white throat and long tail (Note: There are no Blue Jays in California)
- Common year-round resident
- Omnivore, no principal food
- Very intelligent

Phainopepla (*Phainopepla nitens*; Model - male is glossy black, female gray)



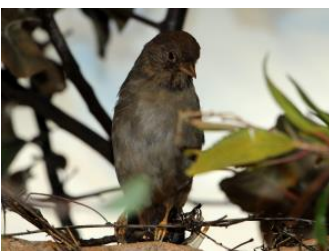
- Distinguished by long tail, ragged crest above head and red eyes
- In wild, perches upright atop shrubs, trees. Sallies out after flying bugs; in winter, feeds on mistletoe, elderberries, etc. (new plants from their droppings)
- In flight, male shows large white patches in wings

Greater Roadrunner (*Geococcyx californianus*; Taxidermy - on sand)



- Distinguished by its size - very large 23" ground bird, streaked breast, long, long tail, bushy crest
- Terrestrial - runs or walks, then stops and raises and lowers tail. Flies only when chased
- Eat small reptiles, insects, small birds and poisonous prey (including rattlesnakes)

California Towhees (*Melospiza crissalis*; Taxidermy - 1 up in dead plant material)



- Distinguished by a rusty orange undertail (large, plain brown sparrow)
- Often seen right outside Nature Center's front door on steps - common year-round resident
- Call is a sharp metallic *chink*
- Usually in pairs; scratches in leaf litter for seeds, insects

California Thrasher (*Toxostoma redivivum*; Taxidermy - on top of plant material)



- Distinguished by long, decurved bill, brown body, long tail, white chin
- Terrestrial – scratches through leaf litter for seeds & insects
- Year-round resident in chaparral
- Rarely seen higher than a shrub or low tree; runs on the ground

White-Crowned Sparrows (*Zonotrichia leucophrys*; Taxidermy - 2 in plant material)



- Distinguished by large size, long tail, bold black and white crown stripes
- Common winter visitor (late Sept. to April), hopping on ground in large flocks for seeds, insects, vegetative matter
- Song, heard in winter, consists of whistles, trills. Call is a *pink*

Wrentit (*Chamaea fasciata*; Model - on a rock in front of bush)



- Distinguished by fluffy brown body, whitish eyes, long tail held high
- A year-round resident, but seldom seen; flits about in dense brush in pairs, eating insects, small berries
- Seldom seen in an open area
- Song is descending notes similar to a ping-pong ball dropped on a table

California Quail (*Callipepla californica*; Taxidermy - male. Female's topknot is smaller and straight; a drab bird seen in classroom)



- Distinguished by curved black topknot, plump gray ground bird, belly is scaled with white, black throat outlined in white
- Its call is *waaw* and *Chi-ca-go*. Flocks give sharp *pit, pit* calls
- A ground feeder of seeds and insects (scratching with feet). Male watches as “sentry”
- Clutches are large - 12 or more seen in spring
- California's State Bird
- Common resident in chaparral

Golden-Crowned Sparrow (*Zonotrichia atricapilla*; Taxidermy - in a bush)



- Distinguished by yellow patch on forecrown bordered with wide black line above eye
- Large sparrow, dull gray below and striped on back
- Forages in small flocks, in dense brushy areas (often with White-crowned Sparrows), eating seeds of weeds/grasses and insects

- Fairly common winter visitor (late Oct. to early April); breeds in NW Alaska

Turkey Vulture (*Cathartes aura*; Painted on back wall)



- Distinguished by 66" wingspan (think Apollo), blackish-brown appearance, bare red head, whitish bill. Flight feathers silvery-looking from below.
- Keen sense of smell - feeds on decaying carcasses (especially road kills)

- Travels long distances searching for food, soaring on V-shaped wings - often rocking back and forth in flight

Red-Tailed Hawk (*Buteo jamaicensis*; Painted on back wall)



- Stocky with rounded wings and short tail (plumage can be variable)
- Most widespread and familiar large hawk in North America - commonly seen on roadside poles

- Hunts mid-sized mammals, reptiles, birds - even snakes - grasping prey with its talons
- Distinguished by 49" wingspan (think Ladyhawk), reddish-orange tails, chocolate bars* and bellyband**

*Distinct dark patch along leading edge of inner portion of underwing

**Streaked contrasting dark feathers across chest of bird

Reptiles

Southern Pacific Rattlesnake (*Crotalus oreganus helleri*)



- One of nine subspecies of western rattlesnakes
- Heat sensing organ called a loreal pit on each side of face and between nostrils and eyes
- Color highly variable
- Triangular face and narrow neck

- Paired fangs unfold from roof of mouth extend as it strikes
- Adds a new rattle with each molt which happens several times a year
- It is deaf but has good vision and smell
- Usually corners or ambushes prey
- Venom is neurotoxin (attacking victim's nervous system) but also contains hemotoxin (affecting blood cells)
- Lives in diverse range of habitats
- Diet includes small mammals, birds, reptiles and amphibians
- Eats every couple of weeks
- 90% of its life it is idle
- Gives birth to live young
- May live 10-20 years in the wild
- 25% of bites are "dry" with no venom

Western Fence Lizards (*Sceloporus occidentalis*)



- Brown to black in color with black stripes on back
- Occupies varied habitats
- Diet include spiders, beetles and grasshoppers
- Has blue belly
- Female may lay one to three clutches of eggs (usually 8) in breeding season
- Goes through a period of hibernation



Other

Behr's Metalmark (*Apodemia virgulti*; on *Buckwheat*)



- Usually flies around March to November
- Wingspan 19-24mm
- Low and fairly rapid flyer
- Feeds on nectar from flowers of California Buckwheat and other plants
- Buckwheat is also common host plant for larvae



- Upper side is orange-brown to black, checkered with black and white spots
- Not a very common sighting