

NAME \_\_\_\_\_  
submit for credit at the end of the field trip

**TERMS TO KNOW:**

- alien/exotic/nonnative/introduced
- annual grass
- coastal sage scrub
- chaparral
- convergent evolution
- divergent evolution
- ecotone
- endemic/native
- fire adapted
- forb
- invasive
- naturalized
- perennial grass (bunchgrass)
- resprouter
- riparian
- rush
- sedge
- shrubland/scrub
- upland
- wetland

1. Name a reptile that is common in California shrublands:
2. Which bird is an endangered species in coastal sage scrub:
3. Which bird is an endangered species in riparian habitats:
4. Name 2 mammals that are common in California shrublands:
5. Typical features of chaparral are

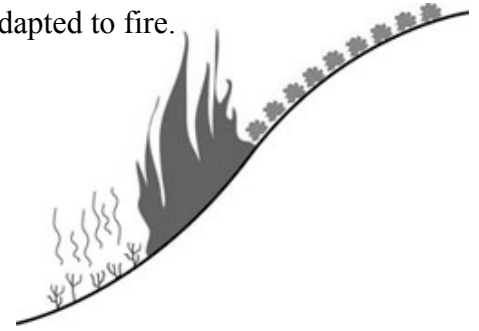


TREES --- SHRUBS --- GRASSES --- FORBS --- VINES (circle all that are common)
PLANTS EVERGREEN OR DROUGHT DECIDUOUS?
TYPICAL VEGETATION HEIGHT
TYPICAL VEGETATION DENSITY

6. Typical features of coastal sage scrub are

TREES --- SHRUBS --- GRASSES --- FORBS --- VINES (circle all that are common)
PLANTS EVERGREEN OR DROUGHT DECIDUOUS?
TYPICAL VEGETATION HEIGHT
TYPICAL VEGETATION DENSITY

7. Describe one way in which plants in the coastal sage scrub are adapted to fire.



8. Typical features of riparian habitat are

TREES --- SHRUBS --- GRASSES --- FORBS --- VINES (circle all that are common)
PLANTS EVERGREEN OR DROUGHT DECIDUOUS?
TYPICAL VEGETATION HEIGHT
TYPICAL VEGETATION DENSITY

9. Typical features grassland habitat are

TREES --- SHRUBS --- GRASSES --- FORBS --- VINES (circle all that are common)
PLANTS EVERGREEN OR DROUGHT DECIDUOUS?
TYPICAL VEGETATION HEIGHT
TYPICAL VEGETATION DENSITY

10. Which grassland type is native to California? \_\_\_\_\_

11. Which grassland type is naturalized in California? \_\_\_\_\_

12. What types of plants and animals – riparian, grassland, other? - would you expect to find in an **ecotone**?

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13. Lemonade berry and coyote bush, which are not closely related, both have small, hard, sclerophyllous leaves due to \_\_\_\_\_ evolution, whereas mulefat, a close relative of coyote bush has relatively large, soft leaves with a thin waxy coating (cuticle) due to \_\_\_\_\_ evolution.

14. Why are so many plants in the coastal sage scrub fragrant?

15. What kinds of chemicals create these fragrances?

**Mission Trails Regional Park – A taste of Southern California\***

Here you will find many examples of the vegetation types found in Southern California: shrublands, grasslands, and riparian woodlands. There are two primary types of shrublands: chaparral (“hard” chaparral) and coastal sage scrub (“soft” chaparral).

	<p align="center"><b><u>Genus species, common name, Family</u></b></p>
<p align="center"><b>Common coastal sage scrub plants</b></p>	<p><b>shrubs</b>  <i>Artemisia californica</i>, California sagebrush, Asteraceae  <i>Eriogonum fasciculatum</i>, California buckwheat, Polygonaceae  <i>Rhus integrifolia</i>, lemonade berry, Anacardiaceae  <i>Rhus laurina</i>, laurel sumac, Anacardiaceae  <i>Salvia mellifera</i>, black sage, Lamiaceae  <i>Salvia apiana</i>, white sage, Lamiaceae  <i>Baccharis pilularis</i>, coyote bush, Asteraceae  <i>Baccharis sarothroides</i>, broom baccharis, Asteraceae  <i>Opuntia littoralis</i>, coastal prickly pear, Cactaceae</p> <p><b>subshrubs</b>  <i>Encelia farinosa</i>, California sunflower, Asteraceae  <i>Mimulus aurantiacus</i>, bush monkeyflower, Scrophulariaceae</p> <p><b>other</b>  <i>Marah macrocarpus</i>, wild-cucumber, Cucurbitaceae</p>
<p align="center"><b>Common riparian plants</b></p>	<p><b>trees</b>  <i>Platanus racemosa</i>, California Sycamore, Platanaceae  <i>Quercus agrifolia</i>, coast live oak, Fagaceae</p> <p><b>tree/shrub</b>  <i>Salix lasiolepis</i>, arroyo willow, Salicaceae</p> <p><b>shrub</b>  <i>Baccharis salicifolia</i>, mule fat, Asteraceae</p>
<p align="center"><b>Common plants of annual grasslands</b></p>	<p><b>annual grasses</b>  <i>Bromus diandrus</i>, ripgut brome, Poaceae  <i>Bromus madritensis</i>, red brome, Poaceae  <i>Avena barbata</i>, slender wild oats, Poaceae  <i>Avena fatua</i>, wild oats, Poaceae</p> <p><b>forbs:</b></p> <div style="text-align: right;">  <p align="right"> <small>CELEBRATING WILDFLOWERS  <i>Eschscholzia californica</i>                      California Poppy</small> </p> </div>

