

# Interpretive Center Displays

## Principal Concept: Communities of Life

Three communities converge in Placerita Canyon:

- Riparian Woodland
- Chaparral
- Oak Woodland

Where they overlap, there is added value for wildlife. Animals can reach a variety of food sources and habitats without having to travel far.

### Riparian Woodland Display

Tall sycamore trees and shrubs like the wild rose and mule fat grow along the creek in the riparian woodland. Winter rains washing down the canyon can break and dislodge riparian plants but many can grow back from broken branches on the banks of the creek. Although Placerita Creek flows only seasonally, the soil is always wetter here than on the hillsides. Dragonflies and amphibians start their lives in the creek water, then move to the land as the creek dries in summer. The water and riparian plants attract insects, birds, salamanders and mammals.



## Plants

### **Miner's Lettuce** (*Claytonia perfoliata*)



- In a woodland it can cover acres like a dichondra lawn
- Eaten by Native Americans and miners as fresh salad herb and can be found commercially today
- Leaves have a succulent appearance; the flower stem appears to have the center of the leaf pierced
- An annual that can be found in the spring in any moist area

### **California Wildrose** (*Rosa californica*)



- Semi-deciduous, aromatic; flowers April to August
- Large thickets because it spreads by rhizome roots
- Impressive in the fall with its fruit; the rose hips are food for wildlife
- Soft green leaves, not shiny like garden rose
- Found along the Canyon Trail

### **Arroyo Willow** (*Salix lasiolepis*)



- Host plant for the larvae of many butterflies
- Birds will eat the buds and catkins
- Can tolerate uprooting in the stream and rerooting downstream after a flood
- Can be seen in the stream across from the Oak of the Golden Dream
- It has a smooth gray bark and remains a shrub
- Willows were the original source of aspirin
- A severe allergen

### **Mule Fat** (*Baccharis salicifolia*)



- Like most Southern California riparian shrubs, Mule Fat has gender; some plants will have only the male flowers with pollen and others only the female flower with seeds
- One of several plants whose stems were used for arrow shafts; Mule Fat stems are fairly straight for this use
- Very common in any stream course
- Has sticky willow-like leaves, 10 -12 ft. tall, evergreen, with multiple vertical branches
- Common name derives from placer miners whose donkeys would eat the leaves: the donkey's stomach would swell up due to toxins, but the miners originally thought they were getting fat on Mule Fat

### **Blackberry** (*Rubus ursinus*)



- Has leaves of three like Poison Oak; but unlike Poison Oak, has green-gray stems with thorns
- In Southern California, the berries are rarely seen because all sorts of animals relish the berries
- Parent plant of loganberry and boysenberry
- Stem tips can root

- Dioecious – separate male and female plants
- Found on the Canyon and Waterfall Trail

### **California Sycamore** (*Plantanus racemosa*)



- Is a sure sign of a shallow water source; its broad leaves lose lots of water by evaporation; this tree requires a significant water source
- In a densely vegetated riparian area this tree's trunk can become quite distorted in order to reach the sun, like near the Oak of the Golden Dream

- Is one of the preferred trees for the Acorn Woodpecker to chisel out a nest and set up an acorn granary
- Grows fast and has a softer wood than the oaks
- Native Americans probably used the large leaves as diapers as the leaves have a furry, soft underside; also probably used as toilet paper

### **Juncus** (Irisleaf Rush) (*Juncus xiphioides*)



- Flowering perennial with stout creeping rhizomes
- Rush is a monocot
- Found only in wetlands or streamsides
- Referring to the stems of monocots, this old mnemonic (a memory devise) is helpful but not always true: “Sedges have edges; rushes are round; grass is hollow right up from the ground.”

### Creek Monkeyflower (*Mimulus guttatus*)



- Also called Seep Monkeyflower
- Annual or perennial herb (rhizomatous)
- Commonly found in Placerita Creek streambed or seeps along Waterfall Trail
- Showy yellow flowers (with red dots and hairy throat) blooming April to June; bee-pollinated
- Does well in well-watered home gardens

### Scarlet Monkeyflower (*Mimulus cardinalis*)



- Stout, branching, hairy and sticky, perennial herb; grows 2-4 ft. high
- Scarlet, 2-lipped flowers April to October; rhizome rooted. Flower flattened vertically with upper petals erect and curved forward, lower petals curved back toward stem
- Found in streambeds
- Does well in watered home garden along the edge of a lawn

### Poison Oak (*Toxicodendron diversilobum*)



- Winter deciduous woody shrub or vine
  - Leaf divided into three glossy leaflets – bronze when unfolding in February/March, bright green in spring, turning reddish in summer and bright red or pink July to October
  - White flowers March to June
- 
- Similar to Poison Ivy (which is not found in Southern California) but a different species: both have the leaves of three, a sign to beware; all parts of the plants have urushiol that can bind to the skin and cause an allergy (contact dermatitis); washing with soap (especially alcohol soap) may wash away urushiol if done immediately after exposure
  - Urushiol doesn't affect birds or animals which may eat the white berries and the leaves (Dogs can pick up the urushiol on their fur and transfer it to humans, so keep pets leashed!)
  - Beware of brown leafless stems in the fall and winter as well! The plant drops its leaves, but the stems are just as allergenic. All parts of this plant upon contact can cause a rash - summer or winter!



## Birds

### **Hermit Thrush** (*Catharus guttatus*; Taxidermy - in Sycamore tree)



- Difficult to see - often in shade and hops on ground for insects
- Usually seen singly. Flicks wings, raises & lowers tail when perched
- Has a beautiful song
- Fairly common year-round resident

- A medium-sized songbird with an upright posture distinguished by breast of blackish spots; thin white eye ring

### **Cooper's Hawk** (*Accipiter cooperii*; Painted on back wall)



- Distinguished by long rounded tail (white band at tip of tail) and reddish barring on chest (see one in classroom)
- Ambushes birds (often seen at bird feeders)
- Fairly common year-round resident
- Flies with quick wing-beats

- Confused sometimes with Sharp-shinned Hawk (shorter, square tail) – a winter visitor

### **Western Tanager** (*Piranga ludoviciana*; Taxidermy - male in breeding plumage - in Blackberry)



- Spring migrant (April/May); early fall migrant (Jul/Aug/Sept); found gleaning insects through foliage high in trees
- Breeds from 4,000 ft. to 60 degrees N in the Northwest Territories

- Song is similar to American Robin, but shorter and more "hoarse"
- A medium-sized songbird distinguished by reddish/orange head, yellow body, black back, two wing bars (female lacks orange; head a dull olive color)

## **Mammals**

### **Coyote** (*Canis latrans*)



- Life Span: 10-14 years (up to 20 in captivity)
- Mating season: Dec – Jun
- Gestation Period: 63-65 days
- Litter Size: 6-7 pups
- Litters per year: one

- Due to the disappearance of its larger cousins, the wolves, range expanded now and is found in most of the country (before: western grassland and deserts)
- In some areas they can bring down a deer by hunting in packs
- Usually preys on small mammals, reptiles, insects, fruit
- Well-known howling; monogamous
- Size: 41.5-52” (male larger than female)
- Habitat: plains, prairies, woodlands, brushy areas

### **Western Gray Squirrel** (*Sciurus griseus*; Taxidermy – on Sycamore branch)



- Life Span: 7-8 years
- Mating season: Feb – Mar
- Gestation Period: 44 days
- Litter Size: 1-5 kits
- Litters per year: one (southern part of its range sometimes second litter as late as August)

- The only gray tree squirrel in the oak and conifer forests along the Pacific Coast
- Eats acorns, nuts, berries, fungi, pine seeds; active all year
- Builds nest of leaves or twigs during warm months. In winter often moves into hollow trees.
- Bushy tail helps to maintain balance when jumping from limb to limb or running along tree limbs (compared to Ground Squirrel with relatively small tail)
- Size: 18-23”
- Habitat: forests, woodlands

Listed as extirpated in some California areas. Fox squirrels (*Sciurus niger*) were introduced to the Los Angeles area in about 1904. These aggressive cousins drove the more reclusive western grays back into the mountains, where competition was not so strong. This non-native species introduction appears to be the largest threat in the southern California area. (source: Wikipedia.org)

## Raccoon (*Procyon lotor*)



- Life Span: 2-3 years (14-20 in captivity)
- Mating season: Feb – Mar
- Gestation Period: 63 days
- Litter Size: 2-7 kits
- Litters per year: one

- One of North America's most versatile and adaptable animals
- A mammal that lives throughout much of the world
- Expert climber and skilled swimmer; stands easily on hind legs
- Primarily nocturnal; quite intelligent
- An omnivore – eats acorns, walnuts, fruit, fish, crayfish, aquatic foods, amphibians
- Often dens in hollow oak trees and rock crevices
- Size: body length 26-40 inches, weight 11-57 lbs
- Recognized by its "bandit's mask"
- Habitat: forests, woodlands, residential areas, especially near water

## Other

### **California Newt** (*Taricha torosa*; under water behind front glass on left side)



- A gray and orange warty newt that lives under leaf litter, logs and rock crevasses
- Breeds in ponds or slow-moving water
- Exudes a potent neurotoxin on its skin that is hundreds of times more toxic than cyanide

- California Newt is dangerous to humans only if ingested
- Predators include the Garter Snake, mosquitofish and crayfish
- Eats earthworms, snails, slugs, mosquito larvae, crickets, and other invertebrates

### **Baja California Treefrog** (*Pseudacris hypochondriaca*; Adult on a rock in the center of the stream)



- Very small frog 3/4 to 2 inches
- Range from Southern California to Baja California
- May be green, brown, cream or gray in color; can change its color like a chameleon

- Makes the classic frog sound “ribbit”
- Can be found high up a tree trunk
- Has smooth moist skin
- Eats a variety of invertebrates and a high percentage of flying insects
- Lays eggs in water attached to sticks or reeds

### **Baja California Treefrog Eggs and Tadpoles** (*Under water attached to sticks middle left side*)



- Females lay eggs in gelatinous clusters of 10-80 eggs
- Female lays a total of 400-750 eggs
- Eggs deposited in winter and spring
- Eggs hatch in 2-3 weeks

- Large schools of tadpoles feed on bacteria, algae, protozoa and organic debris
- Tadpoles enter metamorphosis in about two months



**Damselfly** (*Zygoptera* family; Adults on Willow)



- Related to dragonflies but smaller overall
- Damselflies fold their wings over their slender bodies and along the side of their bodies when at rest
- All damselflies are predators

- In contrast to a dragonfly, the damselfly has smaller eyes which are separated on a smaller rectangular head
- Female deposits eggs in plant tissues in riparian area
- Some species live only a few days to a few weeks

**Damselfly Nymph** (*Under water near back on a rock; model significantly enlarged*)



- Voracious predator of mosquito larvae in ponds and slow-moving water
- Has an extendable lower jaw that unhinges to reach out and capture prey
- Breathes through three external gills at its rear end

- May spend four years in this nymph stage under water
- As they grow they molt a dozen times in the water
- When fully grown it climbs up a stick or reed out of the water to split its skin and emerge as an adult damselfly

**Blue-eyed Darner** (*Aeshna multicolor*; Several adults on Blackberry, two on Sycamore and one on branch protruding from water)



- This is the “classic” dragonfly
- Two pairs of large wings are held open at rest
- Ranges from British Columbia to Northern Mexico
- Only found where there is water
- A predator that catches prey on the fly – especially mosquitos

- May live for only up to 10 weeks between May and October
- Spends most of its life as a nymph under the water
- Each of its large compound eyes is made up of 30,000 individual facets
- Female touches the water surface to lay eggs
- Ancient species flew over dinosaurs but were three feet across at that time

**Blue-eyed Darner Nymph** (*Under water in the sand in front of rock at back of exhibit*)



- Voracious predator
- Breathes by means of gills at its rear and expels water through it to propel forward
- When fully grown it climbs a stick or reed and “morphs” into a dragonfly

**Water Strider** (*Gerridae family; eight are on the water surface in center of stream*)



- Also called “pond skaters”
- May live several months
- Lives in ponds or slow-moving water
- Appears to walk on water because of widely spread legs that are “waterproof” and don’t absorb water

- Eats living and dead spiders and insects on the water’s surface
- To avoid predators, can dive under water or fly away
- During mating season, they communicate by making ripples on the water’s surface
- Prefers shaded places

**Giant Water Bug** (*Belostomatidae family; two bugs, one male with eggs on its back middle right under surface and a female to the left in middle of stream under the surface*)



- Also called “toe biter” or “water wasp” because of painful, but not dangerous, bite
- Fierce predator that stalks and strikes its prey injecting enzymes that liquefy the prey’s soft insides
- Lives in stagnant or slow-moving water

- Flies at night from one water source to another
- May be attracted to light at night
- Male carries the eggs on its back which hatch in about four days
- May live a year or longer
- When it needs to breathe it sticks a “snorkel” above the surface
- As large as 2 inches (found worldwide up to 4.5 inches)

**Diving Beetle** (*Dytiscidae* family; several under water surface center of stream)



- Also called Predacious Diving Beetle
- Found throughout the United States
- Predaceous insect feeds on a variety of aquatic insects
- Injected enzymes liquefy soft tissues to be suctioned out

- Adults breath air underwater by bringing an air bubble with them from the surface
- About 1-1½” long

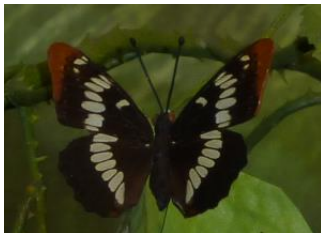
**Water Boatman Beetle** (*Corixidae* family; several under water surface lower left)



- Over 120 species in North America
- Smaller than half inch
- Mostly vegetarian
- Has oar-like back legs that are fringed with fine hairs that are used for propulsion

- Can fly at night between water sources
- Carries a bubble of air under a wing covering for breathing
- Male attracts mate by making a “chirping” sound as it rubs forelegs against its head

**Lorquin’s Admiral** (*Limenitis lorquini*; on Blackberry)



- Smallest admiral – 2-1/2-inch wingspan
- Abundant West Coast species
- Two broods in California – April and September
- Holds wings open at 45-degree angle when basking

- Feeds on California Buckeye, Yerba Santa and bird droppings and dung (not flowers)
- Larvae feeds on Willows and Cottonwood
- Males extremely territorial and will attack any intruders into their habitat, including large birds such as gulls
- Named after French naturalist and collector Pierre Lorquin who came to California during the Gold Rush