



Spotted Towhee (*Pipilo maculatus*)



A year-round resident, this striking rusty-flanked, red-eyed bird can often be found safely scratching for food beneath the cover of vegetation. These vocal, robin-sized birds have many songs and calls. Listen for their buzzy 'chezheeeeeeee' call during spring and summer months.

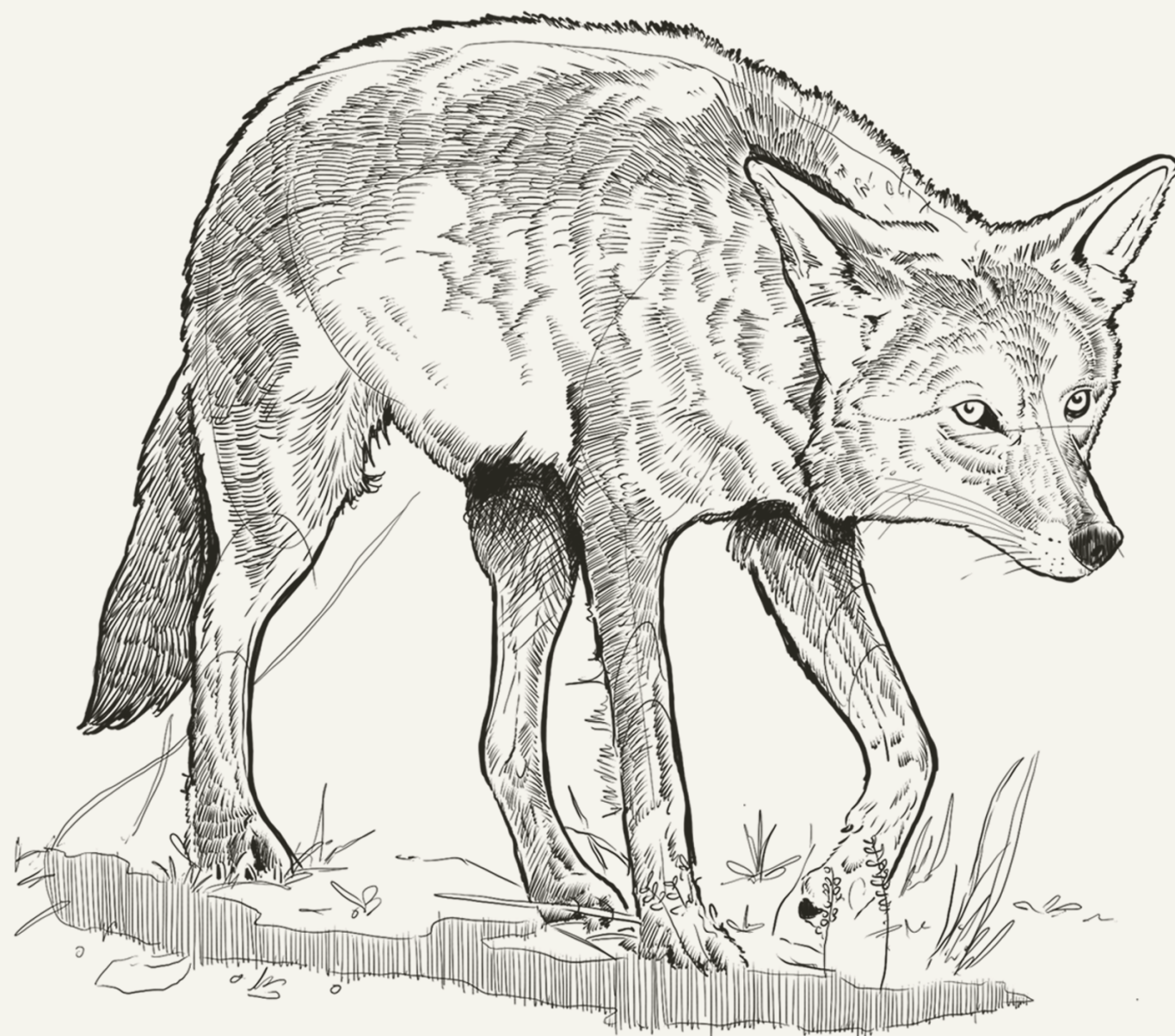
You may see a spotted towhee perched prominently atop a bush, but look quickly to admire as it won't stay long.



The Rotary Interpretive Walk



Coyote (*Canis latrans*)



Coyotes are typically shy and curious. Often called 'Song Dogs,' coyotes are known for their vast array of vocalizations.

Unlike many predators who face extinction, coyotes thrive, due to their intelligence, adaptability, and resilience. They may live alone or in family groups, and may be seen during the day or night. By keeping rodent numbers in check they help limit the spread of diseases. Coyotes are common and co-existence with humans is the best strategy. Control your pets and limit interaction with these beautiful animals. While rarely seen in the Hillside Natural Area, coyotes have been known to pass through the area.



The Rotary Interpretive Walk



Red-tail Hawk (*Buteo jamaicensis*)



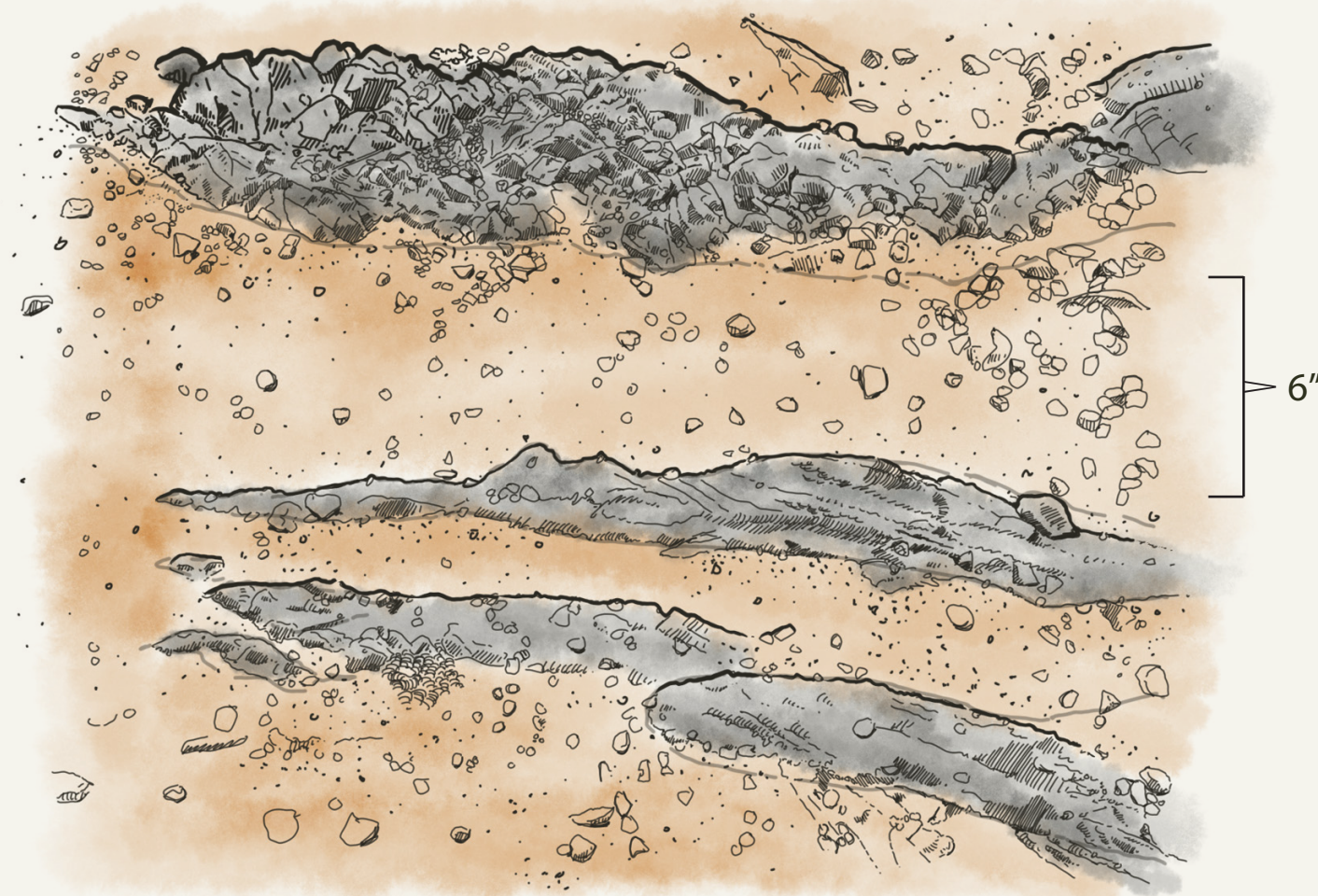
Red-tails soar on rising air currents and hunt from perches, feeding mainly on rodents and snakes. Though adults' tails are red, juvenile birds' are banded black and brown. Look for dark marks along the front, underside edge of the wings to identify mature and young red-tail hawks. Families nest in tall trees throughout the Hillside Natural Area and can be seen flying above the Recycling Center.



The Rotary Interpretive Walk



The Rocks Beneath Your Feet



Layered dark mudstone and light-colored sandstone in the roadbed

The rocks beneath your feet, the Franciscan Terrane, began in Jurassic and Cretaceous time – the time of the dinosaurs – as lava, sand, and mud on the deep ocean floor. They were carried here as the Farallon tectonic plate moved slowly east. As they mashed against North America, pressure and heat changed (metamorphosed) them to the rocks you see today.

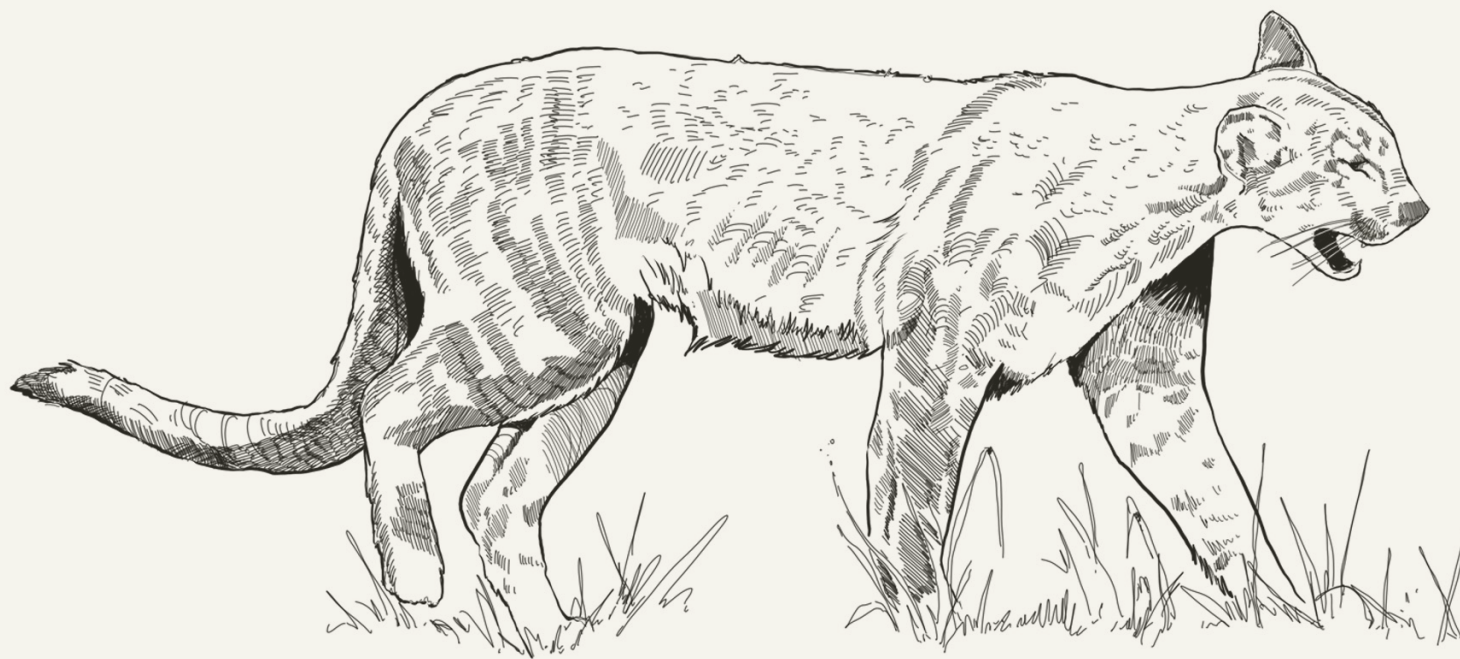
Look for the meta-sandstone layers in the roadbed alongside the quarry, near the Schmidt Lane entrance, and in the outcrops along the trail above the quarry; feel the grains; see if you can find the darker mudstone layers.



The Rotary Interpretive Walk



Mountain Lion (*Puma concolor*)

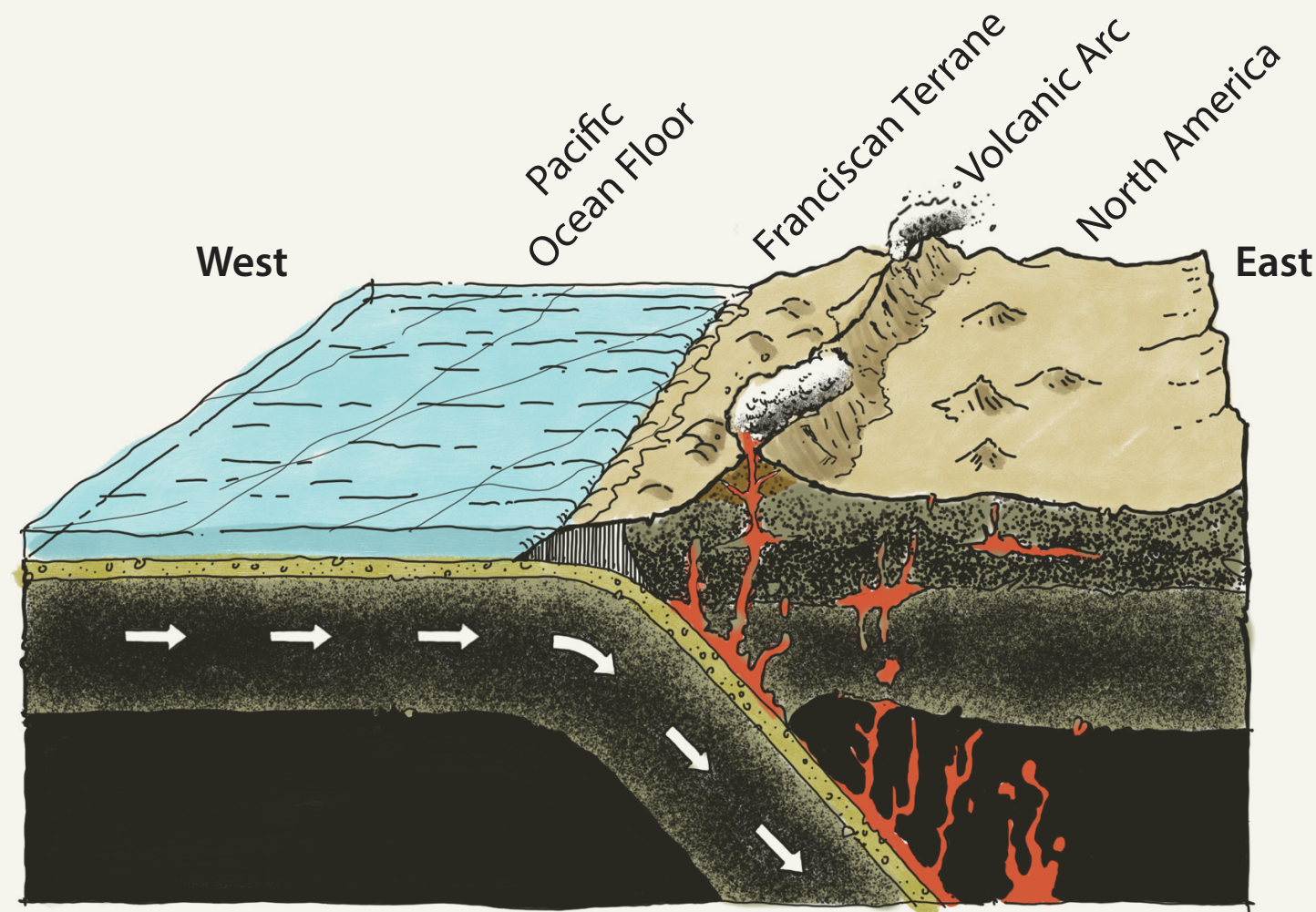


The mountain lion, a top predator, is also known as puma, cougar and panther. Even though you will probably never see one, they inhabit many Bay Area open spaces. Mountain lions are solitary, shy and elusive, and typically active between dusk and dawn. They feed mainly on deer, but also on coyotes, bobcats, foxes, rabbits, and rodents. Adults range from five to nine feet in length, including the tail, and stand two to three feet tall at the shoulder. They can leap 20 feet vertically and 30 feet horizontally. In the unlikely event you encounter a mountain lion, do not run but make yourself look large.



The Rotary Interpretive Walk

Bay Area Geology



Melting crust and rising magma

The Bay landscape you see looking west from here, known as 'Franciscan Terrane,' is truly exotic in that it came from far away. It and the ground you are standing on began as deep ocean floor thousands of miles out in the Pacific. Over the past 150 to 200 million years the ocean floor and its sediments slowly moved east, colliding with and sinking beneath North America. Ocean floor and sediment were dragged several miles down, then pushed back up along faults. You can see Franciscan Terrane rocks here, on Albany Hill, at Point Richmond, in Golden Gate Park, and at the Marin Headlands.



The Rotary Interpretive Walk



The Birth of the Hillside Natural Area



View up Schmidt Lane of the Brown and Hutchinson Quarry, circa 1914

The City's wilderness park got its start in 1943 when the Brown and Hutchinson Quarry, in business since roughly 1900, ceased mining rock for construction. Some of the land was sold for housing, but owner Forrest Brown donated 38 acres to the City for a park. Plans to name the park for Brown never came to pass. The former quarry now houses the City's Recycling Center. Those interested in geology can admire the rock face exposed by quarrying.



The Rotary Interpretive Walk



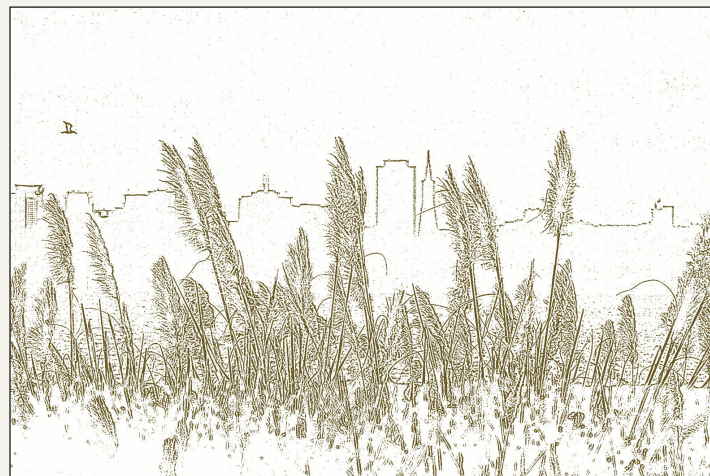
Invasive Plants in the Hillside

Some non-native plants that have colonized the Hillside are called “invasive” as they spread quickly, and affect the environment and human health by displacing native plants and increasing fire hazards. Among the more prolific are eucalyptus, French broom, and pampas grass. Others include artichoke thistle, purple star thistle, Pittosporum and Cotoneaster.

Eucalyptus trees offer beauty, shade, and habitat for monarch butterflies, hawks and owls. But groves shed oily bark and leaves that rot slowly and can flare quickly. French broom, with little yellow flowers, is fire prone, displaces native plants and makes reforestation difficult. Pampas grass, which grows 6 to 13 feet tall, with a plumed flower head, competes with native vegetation, and is fire prone.



Eucalyptus Tree
(*Eucalyptus globulus*)



Pampas Grass (Cortaderia jubata)



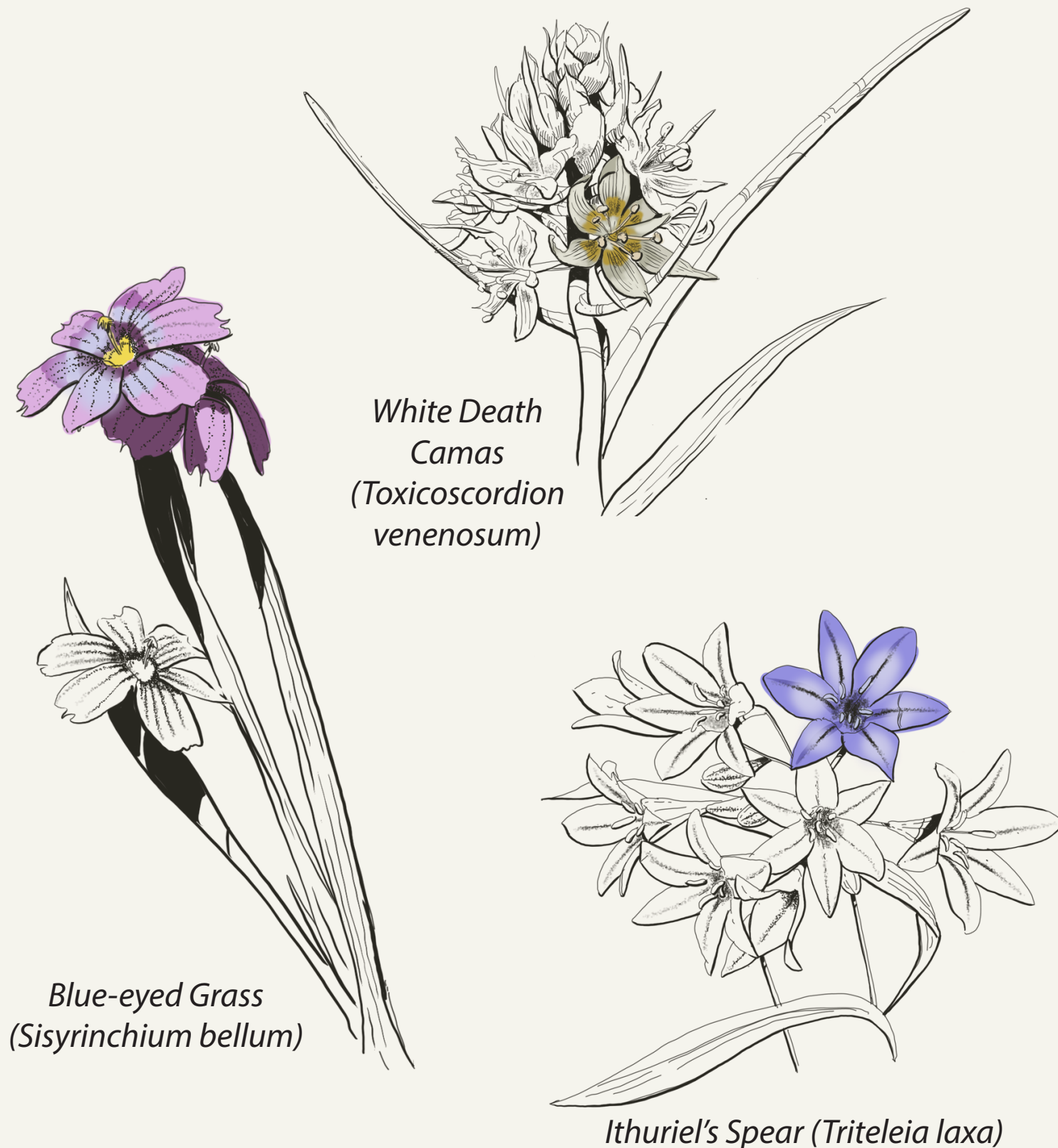
French Broom (Genista monspessulana)



The Rotary Interpretive Walk



Grassland Jewels



Grassy ridges in the Hillside Natural Area hint at what most of the Bay Area looked like when Native Americans set frequent low fires to encourage the growth of edible seeds and bulbs. In spring, native grasses bloom delicately among non-native European wild oats. Jewel-like wildflowers spring from bulbs. These include blue-eyed grass (purple with a yellow eye), nodding clusters of blue dicks, beautiful but poisonous white death camas, and striking purple Ithuriel's spear, named for the angel who guards the Garden of Eden. In summer's drought, leaves wither, and hidden bulbs await the next rains.



The Rotary Interpretive Walk

The Power of Small Creeks



Rain that falls on the soil and fractured rock in the Hillside Natural Area flows to low spots or soaks into the earth to re-emerge at springs. These flows combine to form small streams that often dry up in summer. Though small, these creeks are powerful. Carrying soil eroded from the still-rising hills, they played a large part in building the 'flatlands.' They also support a lush growth of shade- and water-loving plants that provide food and shelter for animals.



The Rotary Interpretive Walk

Oak Groves



*Coast Live Oak Tree
(Quercus agrifolia)*

In California's coastal hills, small valleys between grassy ridges provide extra moisture, shade, and soil depth, nurturing groves of gnarled Coast Live Oaks. Oak roots bring up water that is shared by other plants. Oak woodlands harbor myriad species of invertebrates, ranging from microscopic soil creatures to the beautiful California sister butterfly. Squirrels and other rodents, deer, and some birds depend heavily on acorns. These creatures and the oaks in turn support bats, skunks, foxes, coyotes, snakes, lizards, salamanders, and dozens of kinds of birds.

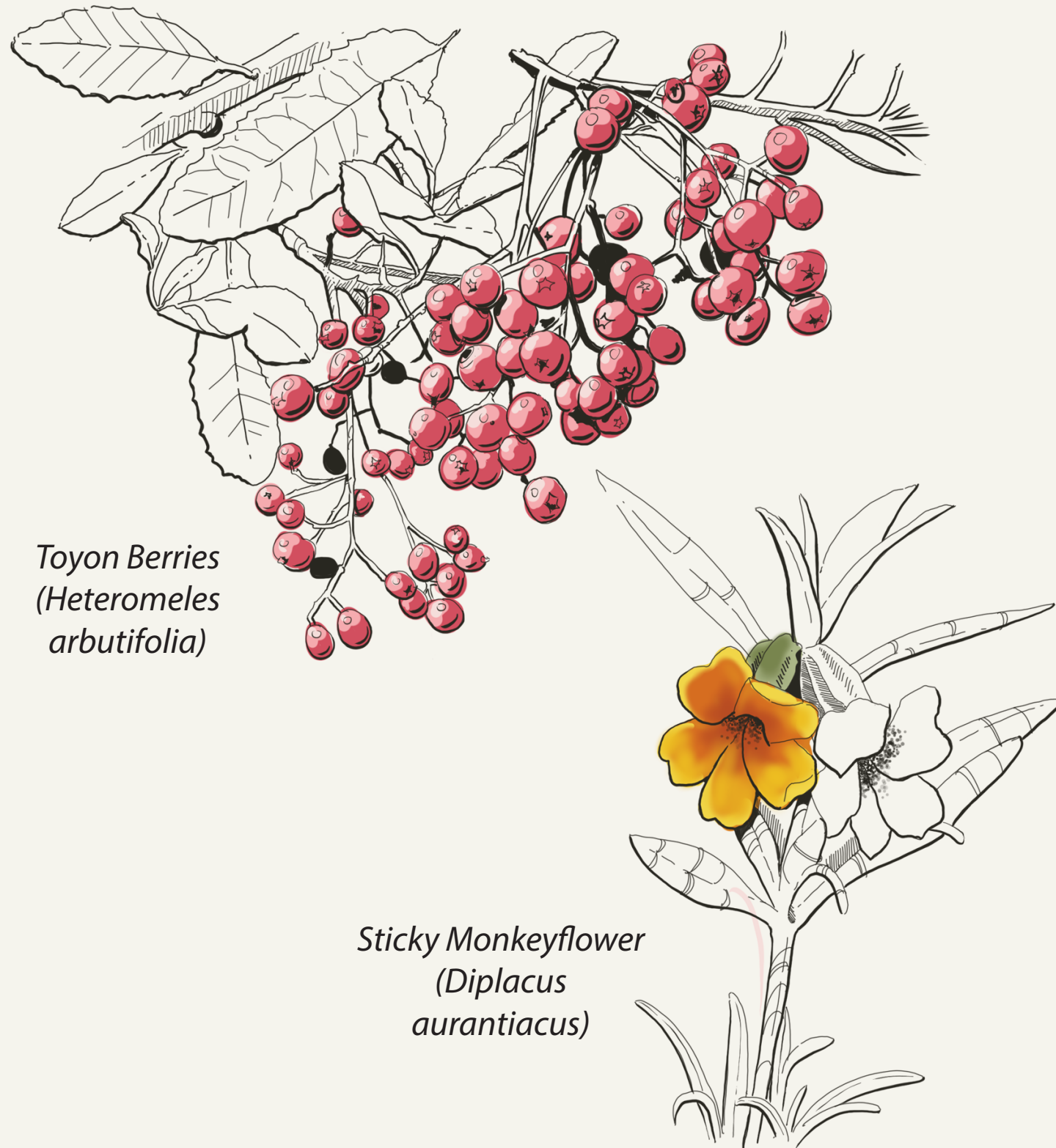


*Coast Live Oak
Leaves and Acorn*



The Rotary Interpretive Walk

Secrets of the Shrubs



Toyon Berries
(*Heteromeles*
arbutifolia)

Sticky Monkeyflower
(*Diplacus*
aurantiacus)

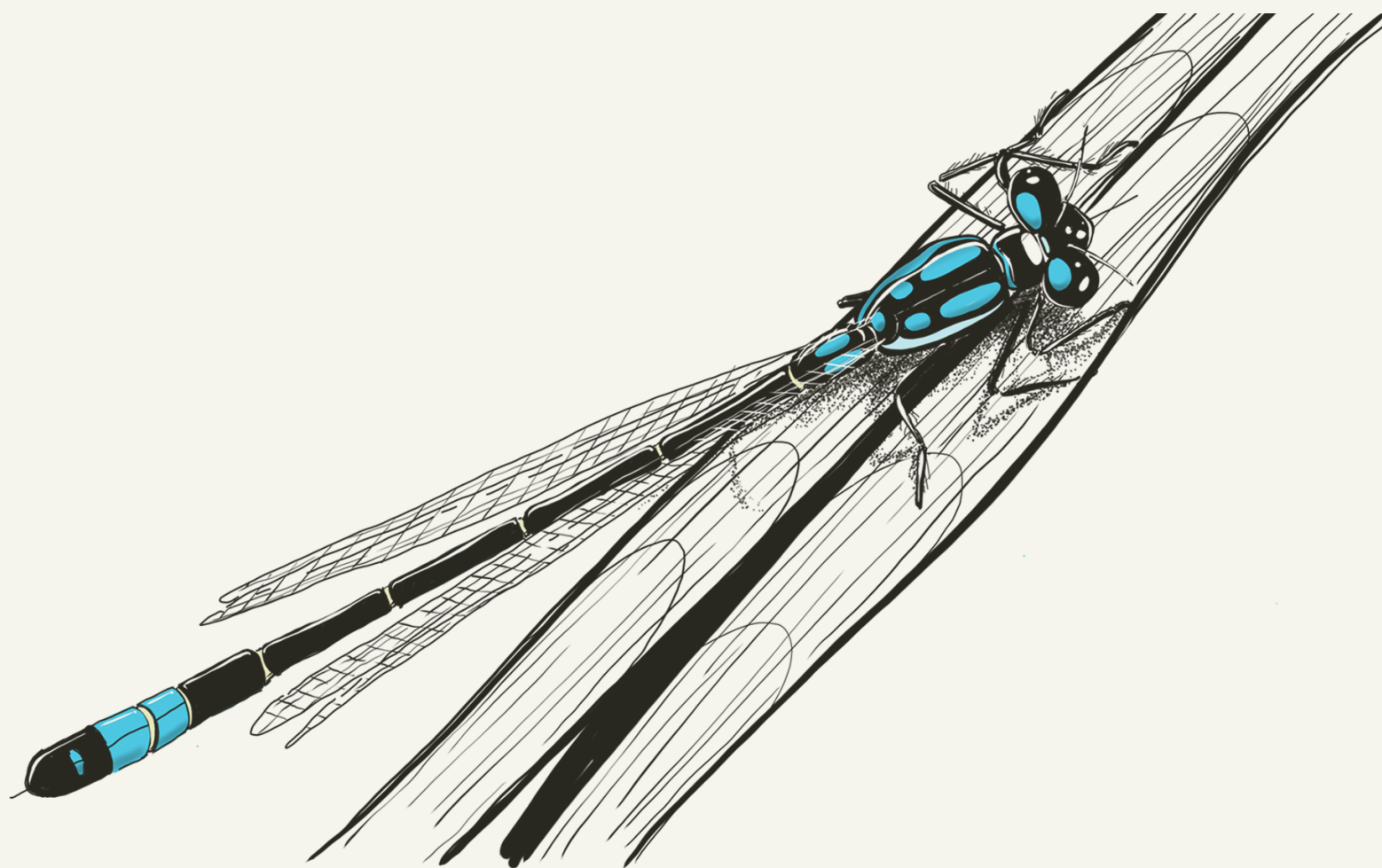
Under oaks or in patches of chaparral, the Hillside Natural Area's woody shrubs deploy a quiet arsenal to survive and thrive. Resins that give sticky monkeyflower its name help the leaves retain water and repel some caterpillars. Like related peaches and plums, red-berried toyon harbors cyanide in its seeds. Birds eat the pulpy fruit and scatter the hard seeds in poop. The poison discourages mice or others that might eat the seeds.



The Rotary Interpretive Walk



Exclamation Damselfly (*Zoniagrion exclamationis*)



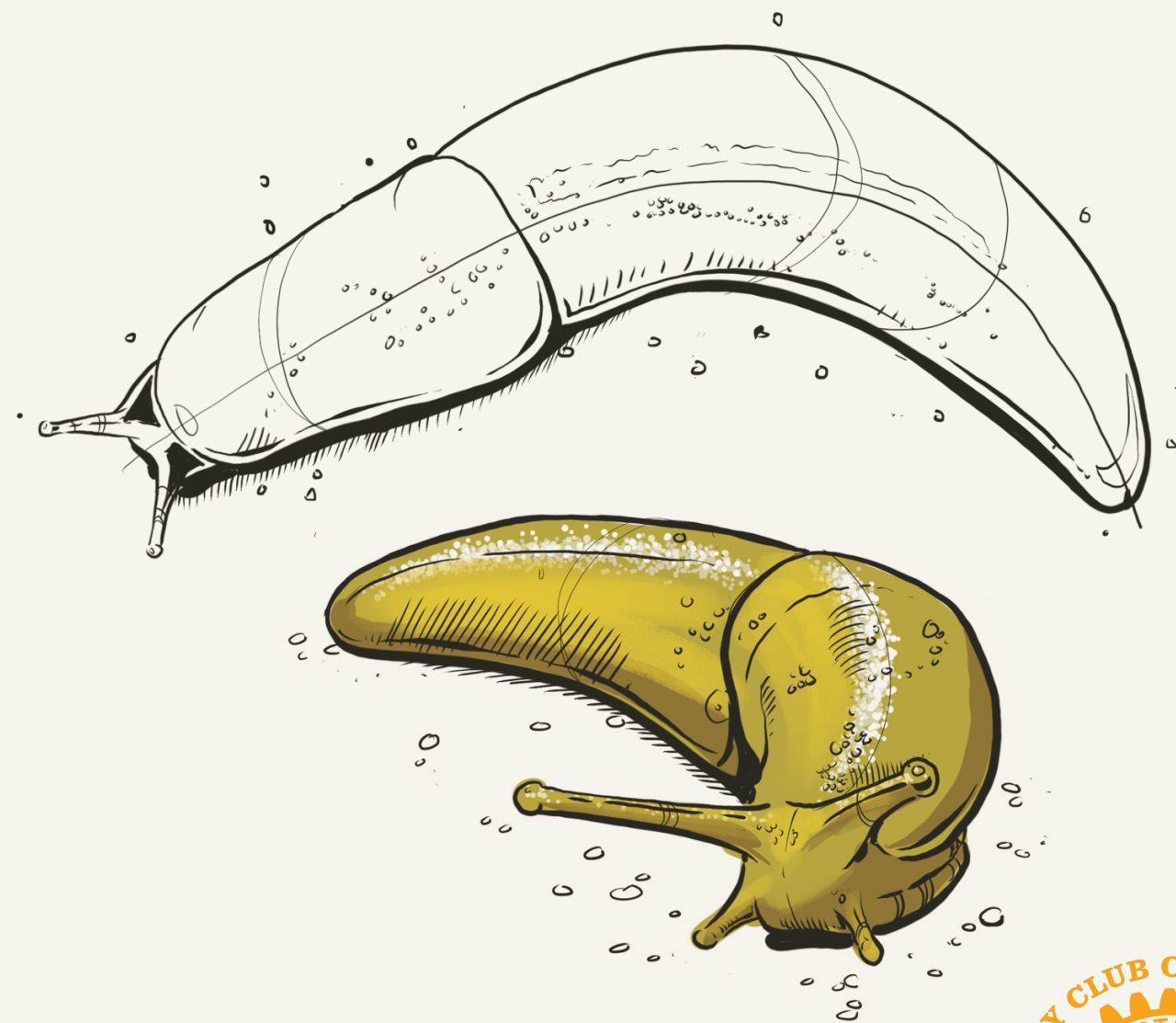
From March to September this spectacular resident of local streams may be seen. It will alight on foliage near streams and pools. The damselfly, which is more than an inch long, can be recognized by a pair of turquoise exclamation points behind its head. Males are turquoise and black. Females may be brown. This species lives only in California and survives only at pools and streams that do not dry up during dry periods. Females insert eggs into soft vegetation floating at the water surface.



The Rotary Interpretive Walk



Banana Slug (*Ariolimax californicus*)

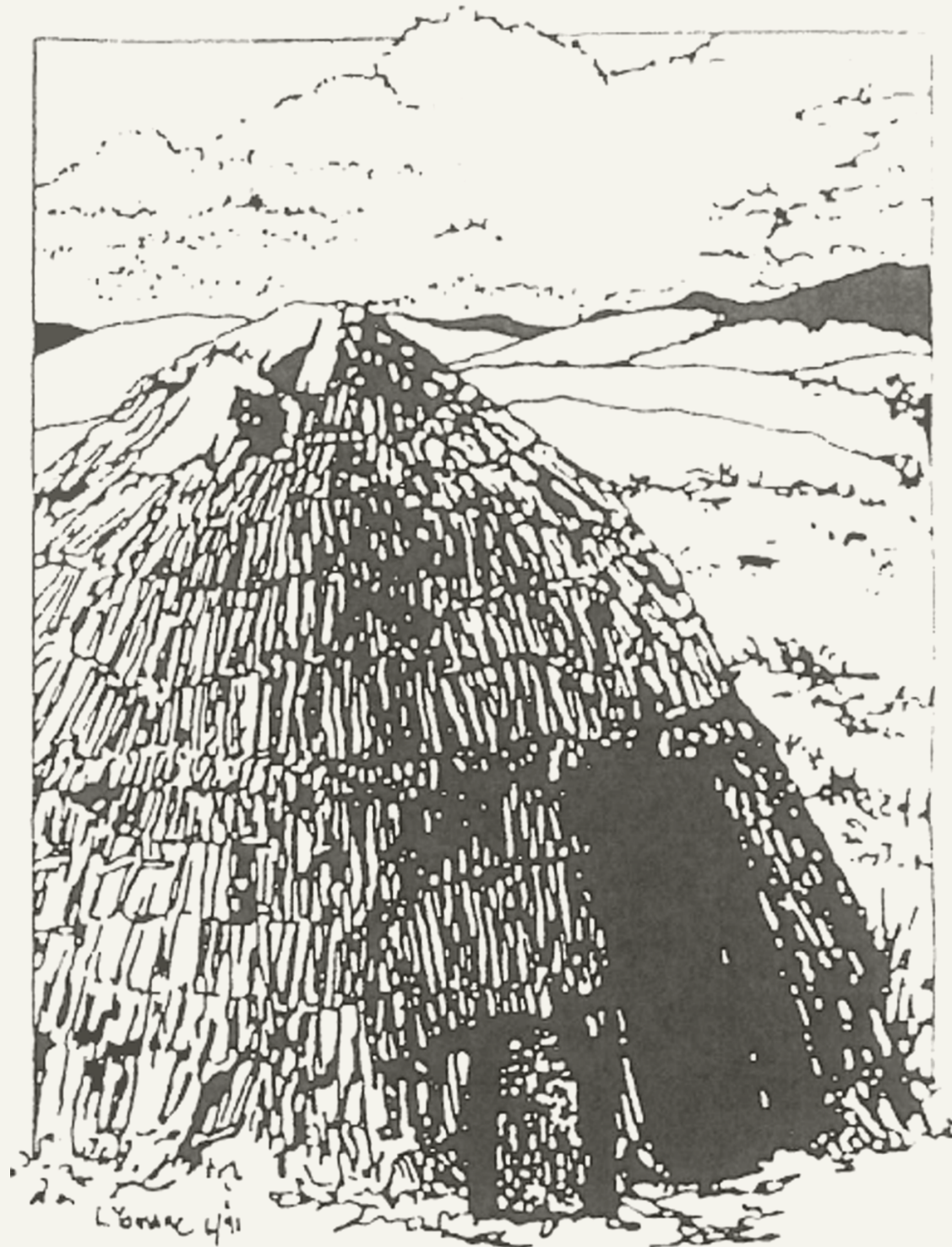


Few creatures as unprepossessing as the banana slug win as much admiration. The mascot at UC Santa Cruz, the six- to ten-inch yellow or mottled mollusk is descended from snails. The shell-less animal loves damp forests, propels itself on a carpet of self-generated slime, and can squeeze into the tiniest of places. The slug is an aerialist, able to descend from a branch on a string of slime, and to crawl along branches upside down. It eats forest debris, moss, poison oak, and more. It is also a hermaphrodite, with both male and female organs.



The Rotary Interpretive Walk

Homeland of the Huchiun



Tule House and Seed Roasting Basket
Illustrator Credit: Linda Yamane (Rumsien Ohlone)

Welcome to the homeland of the Huchiun, a Chochenyo Ohlone-speaking tribe. Huchiuns managed the landscape using horticultural techniques, including prescribed burning, that increased the health and numbers of the plants and animals on which they relied. Local Ohlone and Bay Miwok creation narratives describe how the world and people were created at the dawn of time. Archeological evidence currently points to many thousands of years of habitation.

Today's Ohlones and Bay Miwoks cherish their homelands and cultures and advocate for the protection of ancestral village and burial sites.



The Rotary Interpretive Walk