

# BIRDS AND PLANTS OF CODORNICES AND CERRITO CREEK

Field guide to their mutualistic relationships and roles in our ecosystems

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Coast Live Oak

American Goldfinch

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### INTRODUCTION

Cerrito Creek and Codornices Creek are two well-maintained and intact creeks in the area. The two creeks have diverse ecosystems surrounding them that welcome wildlife and people. There is an abundance of plant species that surround the creeks, and such plants provide plenty of resources to the fauna that rely on them for survival – especially birds!

It is crucial for conservationists and/or nature enthusiasts to identify birds by their preferred habitats, which include plants such as trees and shrubs, flowering plants, vines, and many others.

This field guide will highlight the importance of mutualistic relationships between local birds and plants at Cerrito Creek and Codornices Creek. Birds may use these plants for as a direct source of food or one that hosts insects for them to eat, shelter, nesting material, and for other reasons. In return, the birds may help the plants with seed dispersal, pest control, pollination, and in other important ways. As result, native bird and plant species play an important role in maintaining the ecosystem.

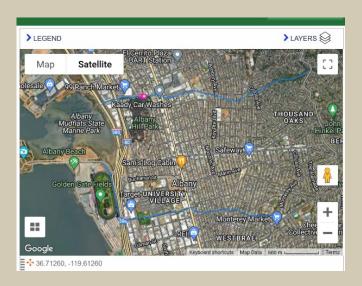


Photo of Cerrito Creek. Courtesy of Friends of Five Creeks.

#### **RESEARCH TOOLS**

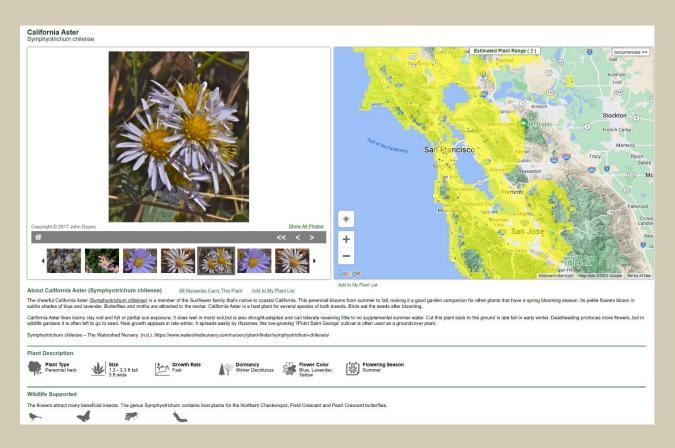
#### Calflora: Map out plant species

Calflora is a nonprofit organization that uses information from many sources, including iNaturalist, public agencies, and scientists. Its website helps people learn about plants that are native to California and even invasive plants. You can find out what plant observations have been made and find out what plants grow in a place via an illustrated list of plants and a map that points out their actual locations.



#### Calscape: Learn about native plants

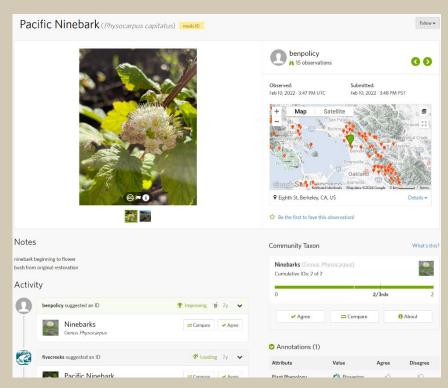
A website by the California Native Plant Society, Calscape helps you discover and grow native plants in California. You can search for a plant of choice and see if they are native to any location in California, and you are provided with a small description about the plant and environmental factors to consider. The site helps people figure out which plant they would like, where to buy them, and how to grow them.



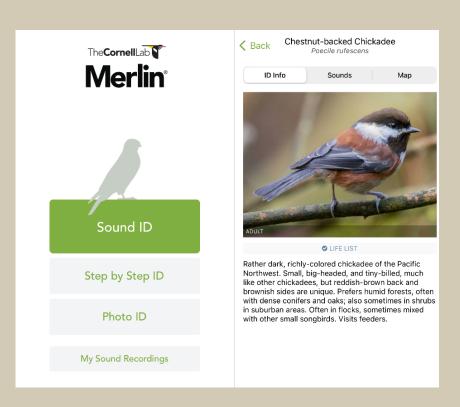
#### **RESEARCH TOOLS**

#### iNaturalist: Identify and make observations

An accessible tool that uses citizen science to make identifications with observations. You can make an observation by taking a photo of the target species, and it will give suggestions. Once posted to the website, other people can help you identify the species and provide suggestions as well. This application is also available for mobile use – on IOS and Android.



#### Merlin ID: Identify bird species by sound and photo



An application created by the Cornell Lab, Merlin ID is a tool to identify birds nearby. Two ways to identify birds are to conduct a sound ID, where you record the bird's call, and to take a photo of the bird (if close enough). Then, it will give you the best suggestions based off your observations and provide some information about the bird. This free application is available for Android and IOS.

#### **SONGBIRDS**



# CHESTNUT-BACKED CHICKADEE

#### Poecile rufescens

The most vibrant of all chickadees, this small bird is easy to notice with its reddish back, dark brown head, and white cheeks, along with its dark gray and highlighted wing feathers, and white underparts. This little busy bird feeds largely on insects and other invertebrates collected from foliage. The bird clings to branches upside down, looking for insects. It also feeds on seeds and plant matter, mainly those of conifers.



## AMERICAN GOLDFINCH

#### Spinus tristis

You may see the American Goldfinch feeding on catkins while hanging from birches and alders during the springtime. Unlike other finches, the American Goldfinch uses its feet to help in feeding. It first pulls one of the tassels up with its beak and then uses its toes to hold the catkin still against the branch.



# AMERICAN ROBIN

#### Turdus migratorius

You may know robins from their melodic choruses, since they are the earliest singers at dawn, and city robins sing especially loudly to be heard over the traffic and noise. These red-chested birds are active mostly in daytime, looking for worms in grass or berries in trees. In winter, robins often feast on invasive berries, like ivy, and spread these invasives to wherever they roost at night. After all, they need something to eat if we don't supply native berries!

#### **SONGBIRDS**







#### **BLACK PHOEBE**

#### Sayornis nigricans

Known for their predominantly black plumage and crisp white belly, this small flycatcher likes both gardens and low shrubby areas near water – often staying year-round. It feeds mostly on insects near water surfaces. These birds rely on any trees or shrubs that can act as some kind of ledge or overhang on which to anchor a mud nest over water areas. However, they are not afraid of humans and have adjusted to human-made structures for nesting purposes as well.

#### **OAK TITMOUSE**

#### Baeolophus inornatus

This plain, gray bird is known as the voice and soul of the oaks. For the Oak Titmouse, oaks offer cavities for nesting, and dense foliage where these birds prefer to sleep in. They are little scavengers and tend to forage on foliage, twigs, branches, and trunks. In addition, these intelligent birds will hammer seeds against branches to open them. They sometimes will hang upside down from oak branches to hunt insects.

#### **CALIFORNIA TOWHEE**

#### Melozone crissalis

The California towhee is plain dusty brown washed with cinnamon and has a long tail that will capture the eye of any bird watcher. You may hear this towhee talk back and forth with their permanent mate, usually on the ground or low shrubs. They prefer a variety of seeds, grasses, and herbs. When they are eating grass seeds, towhees can strip all seeds off at once using its beak. This bird nests in shrubs and low trees along streams.

#### **SONGBIRDS**







#### **BEWICK'S WREN**

#### Thryomanes bewickii

If you encounter a little brown bird with black bars on their long tail, and bold white eyebrows, you may have spotted a Bewick's wren. You may find them in shrubby areas near willows. They glean insects and insect eggs from vegetation. They do this by hanging upside down on branches, and then they catch the insect on the underside of that branch with their beak. Caterpillars, butterflies, moths, and grasshoppers are some of their favorite delicacies.

#### **BUSHTIT**

#### Psaltriparus minimus

The lively bird is petite and plump with a large head and long tail. Low woodlands with more open canopy are their favorite habitats, especially those with oak trees and evergreen shrubs. You may see these active and social birds constantly in motion with 10 to 40 birds, including chickadees and wrens, as they search for aphids, tiny insects, caterpillars, and other tiny invertebrates.

#### **SONG SPARROW**

#### Melospiza melodia

This sparrow species derives its name from its colorful range of songs. Their songs are crisp, clear, precise, yet distinctive. What makes their songs so noteworthy is that they memorize their different tunes that they learn from neighboring birds. You may find them walking and hopping on the ground and flitting through shrubs, branches, grasses, and weeds. These birds stay low and forage secretively, but males come to exposed perches, including limbs of small trees, to sing.

#### **OTHER BIRDS**



#### **ANNA'S HUMMINGBIRD**

#### Calypte anna

The Anna's Hummingbird is attracted to large, colorful blossoms that bloom in the springtime. You may see this small, shimmery bird around red tubular flowers, including the red flowering currant and pink honeysuckle. Using their long extendable tongue, they feed on and collect the flower's nectar, and assist in plant pollination. They also consume small insects and other arthropods caught in flight or gleaned from vegetation.



#### **DOWNY WOODPECKER**

#### Dryobates pubescens

This red, black, and white spotted bird nests in tree cavities and feeds primarily on insects, but also supplements its diet with seeds and berries. The Downy Woodpecker forages on trees, picking the bark surface in summer, and digging deeper in winter. They produce a loud, drumming sound with their beaks as they peck into hollow trees. This woodpecker favors trees like willows, maples, oaks, alders, poplars, and ashes.



#### **GREEN HERON**

#### Butorides virescens

If you are near the creeks, you may see a Green Heron hunt small, wild fish. They hunt at all times of the day and night in the shallows of creeks. The Green Heron has been observed using captured prey or other objects like bread and feathers to bait fish. Mainly waterbirds, they build their nests usually on or over the water. Green Herons use many plant species as nest sites, such as oaks, willows, box elders.

# INSECTS: IMPORTANT BUTTERFLIES FOR NATIVE BIRDS AND PLANTS

It is important to note the impact certain butterflies have on bird populations and native plants. Whether it be providing pollination for various plants or being a direct source of food for birds, these native species of butterflies contribute to the health of the surrounding ecosystem.



#### MONARCH BUTTERFLY

#### Danaus plexippus

The monarch butterfly is the most familiar of North American butterflies, known for its black, orange, and white pattern. Since monarchs are part of the food chain, they face predation on their eggs, larvae or even as adults. They ward off predators with their bright colors to warn them of their unpalatable taste and poisonous characteristics. Bird predators include brown thrashers, robins, sparrows, and scrub jays. You may see this butterfly on oaks, willows, grasses, and herbaceous plants.

#### **SWALLOWTAIL BUTTERFLIES**

#### PIPEVINE SWALLOWTAIL

#### Battus philenor





The Pipevine Swallowtail is considered the signature riparian butterfly of the California Coastal Range. You may see this black with iridescent-blue and orange butterfly depositing their eggs on the shoot tips of the California pipevine, a native to riparian and woodland ecosystems. The larvae feed on the foliage and shoot tips of the pipevine, although adults eat floral nectar from a variety of plants. Their natural predators include birds, and certain species will feed on their eggs.

#### **ANISE SWALLOWTAIL**

#### Papilio zelicaon

This butterfly prefers riparian areas, bare hills, and even roadsides. Adult females lay eggs on the undersides of host plant leaves. If disturbed by predators, it will suddenly trigger stinkhorns from behind its head, which give off a foul odor. They play a crucial role in pollination and contribute to the survival of various plant species.



The Anise
Swallowtail is
frequently
confused with
the Tiger
Swallowtail, but
it is notably
smaller.

#### **SHRUBS**

#### **ARROYO WILLOW**

#### Salix lasiolepis

This shrubby pioneer is commonly found growing in riparian zones, along creeks and pond shores. They form thickets that welcome various insects, who either seek pollen from catkins or lay eggs on willow leaves that form galls. Caterpillars eat on the long and thin leaves. Birds in turn feed on the insects and nest in the thickets. The American Goldfinch is one bird that enjoys feeding on the catkins.



Found at Codornices and Cerrito Creek.

#### **OCEANSPRAY**

#### Holodiscus discolor

Cascading clusters of white flowers drooping from the branches give this deciduous shrub its common name, the cream bush. The delicate flowers have a faint sweet scent, and in contrast to the flowers, its wood is surprisingly tough. Bushtits use this dense shrub as a nesting spot. It is valued as a pollinator plant for native bees and butterflies. It is also a larval host of many butterflies.



Found at Cerrito Creek.

#### **PACIFIC NINEBARK**

#### Physocarpus capitatus

This streambank shrub is identified by its dense stems and shreddy bark, along with its creamy white flowers that appear in late spring.

Because of these qualities, ninebark provides good cover and nesting sites for birds and small mammals. The seeds are often eaten by birds and persist in the seed heads until winter. It is often found in wetlands, but also forms thickets along rivers and moist forest habitats.



Found at Codornices and Cerrito Creek.

#### **TREES**

#### **BOX ELDER**

#### Acer negundo

A species of maple native to North America, its male and female trees show off differently. Early in spring, wind spreads pollen from male trees' delicate tassels. Females' large seed clusters hang on after leaves turn gold in autumn. Several birds and some squirrels feed on the seeds. It often grows alongside waterbodies and prefers bright sunlight.



Found at Codornices and Cerrito Creek.

#### **COAST LIVE OAK**

#### Quercus agrifolia

A keystone plant, the Coast Live Oak contributes to a habitat for a diversity of insects, birds, and small mammals. Fungi and soil animals feed on its organic rich litter and help sustain the tree and other nearby plants. This oak tree's acorns are an important food source for birds, small mammals, and deer. The Oak Titmouse is one known bird to value this tree for its many resources.



Found at Codornices and Cerrito Creek.

#### WHITE ALDER

#### Alnus rhombifolia

This riparian native is an incredible provider of food and shelter for various animal species. Its noticeable eye-like branch scars decay and become nest holes for woodpeckers. This tall tree introduces catkins in the early spring, which also welcome insects and birds. The alder's tiny cones release seeds through winter, another source of food for hungry birds.



Found at Codornices Creek.

#### **GROUNDCOVERS**

#### **CALIFORNIA PIPEVINE**

#### Aristolochia californica

Known for its purple striped, curving pipe-shaped flowers, this deciduous vine is the only host plant of the Pipevine Swallowtail Butterfly. The butterflies lay their eggs only on these vines, and caterpillars munch on its leaves to build up toxins that deter birds. The vines grow from rhizomes to extremely long lengths and will spread out over open ground or sprawl over other plants.



Found at Cerrito Creek.

#### **PACIFIC ASTER**

#### Symphyotrichum chilense

This cheerful perennial is a member of the sunflower family, native to coastal California. Blooming in dry summers and fall, this tough native is a gift to bees, butterflies, and birds. A long blooming season means that insects linger around and provide protein that birds need. Its petite flowers bloom in subtle shades of blue and lavender. Butterflies are attracted to its nectar. Birds eat the seeds after blooming.



Found at Codornices and Cerrito Creek.

#### PINK HONEYSUCKLE

#### Lonicera hispidula

Whether growing as a vine or groundcover, the native honeysuckle is a crucial source of food for wildlife. It is a valuable early spring flower. Its tubular pink flowers are very attractive to hummingbirds. Flowers often partner up with hummingbirds, which become their primary pollinators as they seek the abundant nectar. Other birds eat the fruits, like robins who enjoy its bright red berries.



Found at Codornices and Cerrito Creek.

#### **REFERENCES**

#### **Research Tools:**

Calflora. (n.d.). About Calflora. Calflora. https://www.calflora.org/aboutcf.html#about-text

Calscape. (n.d.). About Us. Calscape. https://calscape.org/about.php

iNaturalist. (n.d.). About · iNaturalist. iNaturalist. https://www.inaturalist.org/pages/about

Merlin ID. (n.d.) Merlin ID. Cornell Lab. <u>Merlin Bird ID – Free, instant bird identification help and guide for thousands of birds – Identify the birds you see (allaboutbirds.org)</u>

#### Songbirds:

iNaturalist. (n.d.). Chestnut-backed chickadee, Poecile rufescens. iNaturalist. <u>Chestnut-backed Chickadee</u> (<u>Poecile rufescens</u>) · iNaturalist

iNaturalist (n.d.). American Goldfinch, Spinus tristis. iNaturalist. American Goldfinch (Spinus tristis) · iNaturalist

iNaturalist (n.d.). American Robin, Turdus migratorius. iNaturalist. <u>American Robin (Turdus migratorius) · iNaturalist</u>

iNaturalist (n.d.). Black Phoebe, Sayornis nigricans. iNaturalist. Black Phoebe (Sayornis nigricans) · iNaturalist

All About Birds (n.d.). Black Phoebe, Sayornis nigricans. Cornell Lab. <u>Black Phoebe Overview</u>, <u>All About Birds</u>, <u>Cornell Lab of Ornithology</u>

iNaturalist (n.d.). Oak Titmouse, Baeolophus inornatus. iNaturalist. <u>Oak Titmouse (Baeolophus inornatus) · iNaturalist</u>

All About Birds (n.d.). Oak Titmouse, Baeolophus inornatus. Cornell Lab. <u>Oak Titmouse Overview, All About Birds, Cornell Lab of Ornithology</u>

iNaturalist (n.d.). California Towhee, Melozone crissalis. iNaturalist. <u>California Towhee (Melozone crissalis)</u> iNaturalist

iNaturalist (n.d.). Bewick's Wren, Thryomanes bewickii. iNaturalist. <u>Bewick's Wren (Thryomanes bewickii) · iNaturalist</u>

iNaturalist (n.d.). Bushtit, Psaltriparus minimus. iNaturalist. Bushtit (Psaltriparus minimus) · iNaturalist

iNaturalist (n.d.). Song Sparrow, Melospiza melodia. iNaturalist. Song Sparrow (Melospiza melodia) · iNaturalist

#### **Other Birds:**

All About Birds (n.d.). Anna's Hummingbird, Calypte anna. Cornell Lab. <u>Anna's Hummingbird Overview, All About Birds, Cornell Lab of Ornithology</u>

iNaturalist (n.d.). Downy Woodpecker, Dryobates pubescens. iNaturalist. <u>Downy Woodpecker (Dryobates pubescens)</u> · iNaturalist

All About Birds (n.d.). Green Heron, Butorides virescens. Cornell Lab. <u>Green Heron Life History, All About Birds, Cornell Lab of Ornithology</u>



#### **REFERENCES**

#### Insects:

iNaturalist (n.d.). Monarch Butterfly, Danaus plexippus. iNaturalist. <u>Monarch (Danaus plexippus) · iNaturalist</u>
Rolih, K. (2019, August). California Pipevine Swallowtail (U.S. National Park Service).
https://www.nps.gov/articles/california-pipevine-swallowtail.htm

iNaturalist (n.d.). Anise Swallowtail, Papilio zelicaon. iNaturalist. <u>Anise Swallowtail (Papilio zelicaon)</u> iNaturalist

#### **Shrubs:**

iNaturalist (n.d.). Arroyo Willow, Salix lasiolepis. iNaturalist. Arroyo Willow (Salix lasiolepis) · iNaturalist iNaturalist (n.d.). Oceanspray, Holodiscus discolor. iNaturalist. Ocean spray (Holodiscus discolor) · iNaturalist iNaturalist (n.d.). Pacific Ninebark, Physocarpus capitatus. iNaturalist. Pacific ninebark (Physocarpus capitatus) · iNaturalist

#### **Trees:**

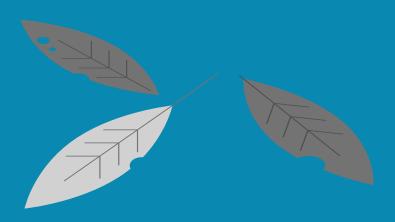
iNaturalist (n.d.). Box Elder, Acer negundo. iNaturalist. <u>boxelder (Acer negundo) · iNaturalist</u> iNaturalist (n.d.). Coast Live Oak, Quercus agrifolia. iNaturalist. <u>coast live oak (Quercus agrifolia) · iNaturalist</u> Daw, S. (2020, January). White Alder. (U.S. National Park Service). <u>White Alder (U.S. National Park Service)</u> (nps.gov)

#### **Groundcovers:**

iNaturalist (n.d.). California Pipevine, Aristolochia californica. iNaturalist. <u>California Dutchman's Pipe</u> (Aristolochia californica) · iNaturalist

iNaturalist (n.d.). Pacific Aster, Symphyotrichum chilense. iNaturalist. <u>Pacific Aster (Symphyotrichum chilense)</u>
• iNaturalist

iNaturalist (n.d.). Pink Honeysuckle, Lonicera hispidula. iNaturalist. <u>Pink Honeysuckle (Lonicera hispidula) · iNaturalist</u>



# CERRITO AND CODORNICES CREEK BIRD AND PLANT FIELD GUIDE

This field guide was created by Paulina Lara as part of an independent Honors project at California State University, East Bay with the Friends of Five Creeks Internship Program. This project was conducted during Spring 2024 from February to May.

