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# NATIVE POLLINATORS OF HUMBOLDT COUNTY

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*Catalogue of Pollinators for Cal Poly Humboldt Turf Conversion Project*

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## NATIVE BEE SPECIES

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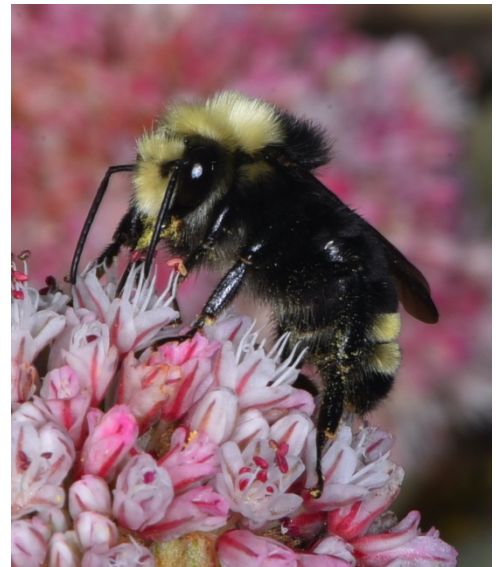
### Yellow-faced bumble bee (*Bombus vosnesenskii*)

**Habitat:** Open grassy areas, urban parks and gardens, chaparral and shrub areas, and mountain meadows.

**Food Source:** *Arctostaphylos*, *Ceanothus*, *Cirsium*, *Eriogonum*, *Eschscholzia*, *Lupinus*, *Phacelia*, *Rhododendron*, *Ribes*, *Vicia*, *Ericameria*, *Clarkia*, and *Grindelia*.

**Nesting Behavior:**

\* Has been in steady decline in California due to competition with invasive honeybees as well as drought-associated limitation of nectar and pollen species.



### Sweat bee (*Halictus spp. Halictidae*)

**Habitat:** Open grassy areas, urban parks and gardens, chaparral and shrub areas, and mountain meadows.

**Food Source:** Attracted to perspiration thus the name Sweat bee.

**Nesting Behavior:**



### Mining bees (*Andrena spp.* (*Apidae*))

**Habitat:** Mining bees are ground nesters, and often prefer sandy soil or near or under shrubs.

**Food Source:** Monolectic, meaning it will generally only collect pollen from one species, *Camissonia ovata*.

**Nesting Behavior:** Nest in well drained, clay heavy, soils present in banks, hills, and road cut-outs. Have also been seen to nest in between logs.

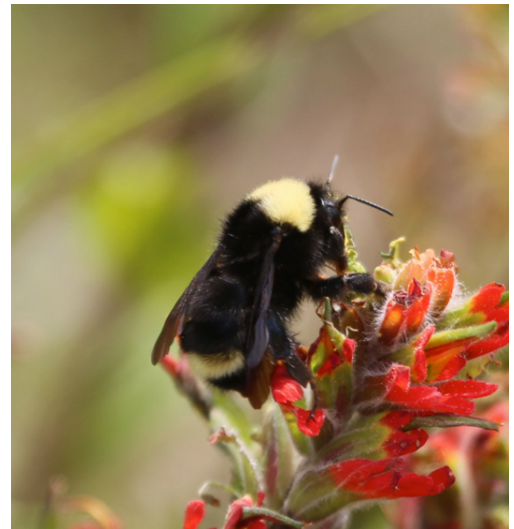


### California bumble bee (*Bombus californicus*)

**Habitat:** Often found in oak woodland savannah at relatively low elevation as well as alpine environments.

**Food Source:** California poppies and Mariposa lilies

**Nesting Behavior:** Social bees with a queen and workers. Their colonies last for one year, and gain new queens over winter, usually underground, and form new colonies from scratch the following year.



### Digger bee (*Anthophora urbana*)

**Habitat:** Areas where grass and mulch are scarce, or under pine straw, or woodchips. Prefer bare land with dry soils.

**Food Source:** Predatory feeders, forage for grubs, small flying insects, or ground swelling pests. Bring back nectar and pollen for larvae to eat.

**Nesting Behavior:** Docile bees with no nest guarding behavior or attack behavior. Will most likely nest for about four to six weeks and then disappear until the next year when soils become wet enough to burrow.



# NATIVE BUTTERFLY SPECIES

\* For successful butterfly introduction, host plants are an essential resource. Males look for females, and females look for host plants (plants where they can lay their eggs, and the newly hatched caterpillars can feed from)

**Habitat:** woodlands near rivers and streams, wooded suburbs, canyons, parks, roadsides, and oases.

**Caterpillar Hosts:** Leaves of cotton wood and aspen, willows, wild cherry, and ash.

**Food Source:** Nectar from many different flowers including thistles, abelia, California buckeye, zinnia, and yerba santa.



## Anise swallowtail (*Papilio zelicaon*)

**Habitat:** Bare hills, mountains, gardens, fields, vacant lots, and roadsides.

**Caterpillar Hosts:** Many species in the parsley family and some in the citrus family.

**Food Source:** Coast angelica, Lomatium, and Yampah



## Orange Sulphur (*Colias eurytheme*)

**Habitat:** A wide variety of open sites, especially clover an alfalfa fields, mowed fields, vacant lots, meadows, road edges.

**Caterpillar Hosts:** Plants in the pea family including alfalfa, white clover, and white sweet clover.

**Food Source:** Nectar from many kinds of flowers including dandelion, milkweeds, goldenrods, and asters.





## Acmon Blue (*Ilcaricia acmon*)

**Habitat:** Likely to be attracted to the north spit area (including Manila, Samoa, etc.) or near open areas of Blue Lake.

**Caterpillar Hosts:** Coast buckwheat (*Eriogonum latifolium*), lupines (*Lupinus*), trefoils (*Lotus*) and milkvetches (*Astragalus*)

**Food Source:** Nectar from many kinds of flowers.





# NATIVE HUMMINGBIRD SPECIES

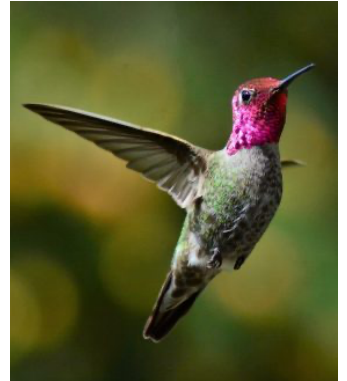
\* Each Hummingbird listed below is a year-round/native. There are other species that visit seasonally as part of their migratory patterns.

## Anna's Hummingbird (*Calypte anna*)

**Habitat:** Likely to be attracted to the north spit area (including Manila, Samoa, etc.) or near open areas of Blue Lake.

**Food Source:** Nectar from many kinds of flowers, as well as small insects and spiders.

**Nesting:** Will lay a clutch of only two eggs with only one brood per season. Hatchlings will remain in the nests for about 3 weeks.



Male



Female

## Allen's Hummingbird (*Selasphorus sasin*)

**Habitat:** Breed in coastal forests, scrub, and chaparral along the narrow strip that stretches from California to southern Oregon.

**Food Source:** Collect nectar from flowers such as bush monkeyflower, Indian paintbrush, columbine, currant, gooseberry, and many others. They get protein by capturing small insects midair or picking them off plants.

**Nesting:** Females choose the nesting site, usually in trees or shrubs near shady streams in blackberry, bracken fern, eucalyptus, cypress, or Douglas-fir.



Male



Female/immature male

## Calliope Hummingbird (*Selasphorus calliope*)

**Habitat:** Live in cool mountain environments, meadows, willow and alder thickets near streams, and forests regenerating after a fire or logging.

**Food Source:** Collect nectar from cup-shaped flowers or isolated tubular flowers not frequently sought out by larger hummingbirds. Forage for small insects by “hawking”- catching them midair.

**Nesting:** Females choose the nesting site, most nesting's having been built on the branches of evergreen trees such as the lodgepole pine, Douglas-fir, or western red cedar, where their nests can be sheltered.

**Male**



**Female/immature  
male**

# NATIVE MOTH SPECIES

## *Euclidia arditia*

**Habitat:** Common in moist forests/meadow habitats.

**Life History:**

**Larvae:** Foodplant specialist that feeds on herbaceous legumes, especially those in the *Lotus* species.

**Adults:** Flies in the spring and early summer. Strictly active in the daylight.



## Shadowy Arches (*Drasteria adumbrata*)

**Habitat:** Common in higher elevation mountain habitats, including open coniferous forests as well as open meadows.

**Life History:** Adults will fly in the summer

**Larvae:** Foodplant species includes *Vaccinium angustifolium* and most likely other *Vaccinium* species.

**Adults:** Found in late spring throughout the summer months. Predominantly nocturnal and will come readily to lights.





# KEY PLANTS

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## BEES:

Frikart's aster, *Aster × frikartii* 'Mönch'

Ray Hartman's California lilac, *Ceanothus* 'Ray Hartman'

Western redbud, *Cercis occidentalis*

California poppy, *Eschscholzia californica*

Blanket flower, *Gaillardia × grandiflora*

Goodwin Creek lavender, *Lavandula × gingsii* 'Goodwin Creek Grey'

Catmint, *Nepeta × fassenii*

Cascade Creek goldenrod, *Solidago californica* 'Cascade Creek'

## BUTTERFLIES:

California Pipeline, *Aristolochia californica*

Valley Oak, *Quercus lobata*

Passion Vine, *Passiflora incarnata*

Del Norte Willow, *Salix delnortensis*

Coast buckwheat, *Eriogonum latifolium*

Lupines, *Lupinus*

Trefoils, *Lotus*

Milkvetches, *Astragalus*

Aristolochia, *Aristolochia*

## HUMMINGBIRDS:

California Bee Plant, *Scrophularia californica*

Scarlet Larkspur, *Delphinium nudicaule*

Cobwebby Thistle, *Cirsium occidentale*

Scarlet Monkeyflower, *Erythranthe (Mimulus) cardinalis*

## MOTHS:

Deerweed, *Acmispon glaber*

Locoweed, *Astragalus spp.*

Coffeeberry, *Frangula californica*

Milkweed, *Asclepias spp.*

Daisy Family, *Asteraceae*

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