Hite Cove Wildflowers

"A fact stated barely is dry. It must be the vehicle of some humanity in order to interest us. It is like giving a man a stone when he asks you for bread. Ultimately the moral is all in all, and we do not mind if inferior truth is sacrificed to superior, as when the moralist fables and makes animals speak and act like men. It must be warm, moist, incarnated, – have been breathed on at least. A man has not seen a thing who has not felt it." Thoreau's Journal, February 17, 1860

This document contains a list of all of the wildflowers in my 2015-2025 Excel file (including a few that I did not include in the PPT files). I decided to mention a few species that were considered common in 1985 that I have never seen. Plants are listed alphabetically, first by scientific family, then by genus and species. Horizontal lines separate families. Sixty-five naturalized species have an asterisk after the common name. Eighteen of the naturalized species are considered invasive by the California Invasive Plant Council. Occasional references to TJM1 and TJM2 refer to the first and second editions of The Jepson Manual, published in 1993 and 2012, respectively. References to the 1985 plant list refer to the booklet published by Botti & Mendershausen in that year.

I added personal reflections on some of the plants to inject a little warmth into what is otherwise a dry compilation. I pray that when you chew on these stones you will taste some of the affection that I feel for the wildflowers, great and small.

AGAVACEAE

(1 sp.)

Wavy-leaf Soap Plant

Chlorogalum pomeridianum

Agavaceae (Agave)

PPT: Peak season

Perennial. Abundant and widespread on Legs 3 and 4. The large rosettes of basal leaves are easy to spot even before plants send up their flowering stalks, which can exceed 2 m in height. If you want to see fresh flowers, stay until dusk. The buds on each branch of the inflorescence open from bottom to top, one to several each evening. The showy white flowers are moth-pollinated and wither by morning. If you can't stay to watch flower buds pop open at dusk, you can still tell that a plant is blooming when you see withered flowers/developing fruit at the bottom of the inflorescence branches and unopened buds higher up.

ALLIACEAE

(1 sp.)

Glassy Onion

Allium hyalinum

Alliaceae (Onion)

PPT: Peak season

Perennial. This is the only onion that I see near Hite Cove. It likes the wet cliffs along Hwy. 140. It also grows along the Merced River Trail and the North Fork of the Merced River near Briceburg. Botti & Mendershausen have *Allium campanulatum* in their 1985 plant list but I have never encountered that sp. near Hite Cove. The 1985 list does not include *A. hyalinum*.

ANACARDIACEAE

(2 sp.)

Fragrant Sumac

Rhus aromatica

Anacardiaceae (Sumac)

PPT: Peak

Perennial shrub with small yellow flowers. Common on Legs 1 and 4. Most people do not have an allergic reaction to this plant, unlike the next one.

Poison Oak

Toxicodendron diversilobum

Anacardiaceae (Sumac)

PPT: Peak

Perennial shrub, super-abundant on Legs 1, 2, 4. Most people are allergic to this plant, some severely so. All parts of the plant, even bare stems in the fall, can stimulate allergic reaction. The rule "leaves of three, let them be" refers specifically to this plant. It pays to play it safe even though there are other 3-leaved plants at HC (including Fragrant Sumac) that are benign.

APIACEAE

(9 sp.)

Bur Chervil *

Anthriscus caucalis

Apiaceae (Carrot)

PPT: Peak

Naturalized annual, occasional on all four legs. Similar in appearance to *Torilis arvensis*, but with a more open inflorescence. Not very exciting.

American Wild Carrot

Daucus pusillus

Apiaceae (Carrot)

PPT: Peak

This native annual is fairly common on Legs 3 and 4. The white flowers are nestled in a bowl of divided leaves or bracts.

Common Lomatium, Bladder Parsnip

Lomatium utriculatum

Apiaceae (Carrot)

PPT: Early

This perennial is the earliest blooming member of the Carrot family. Common on all four legs. The yellow flowers are a pleasing sight in February. The compound umbels have prominent bractlets but no bracts. This plant has many common names, only two of which are mentioned. The name "Bladder Parsnip" derives from the fact that the sheathing at the base of the leaves resembles a bladder.

Purple Sanicle

Sanicula bipinnatifida

Apiaceae (Carrot)

PPT: Early

All three HC Sanicles are perennials. This one is fairly abundant on Legs 3 and 4. It is easy to recognize by its coarsely pinnately lobed leaves. The common name is somewhat misleading. "Purple" Sanicle can have yellow or purple flowers. At Hite Cove the flowers are yellow. At the west end of the Merced River Canyon the flowers are usually purple.

Gambleweed

Sanicula crassicaulis

Apiaceae (Carrot)

PPT: Early

This sp. is much less common than the other two. I see occasional specimens on Leg 3 between the Lower Mine and the settlement area. Its palmately lobed leaves distinguish it from the other Sanicles.

Turkey Pea, Tuberous Sanicle

Sanicula tuberosa

Apiaceae (Carrot)

PPT: Early

This one is a bit tricky. Poison Sanicle (*S. bipinnata*) looks very similar to Turkey Pea and it probably also occurs at Hite Cove. They both have yellow flowers and finely dissected leaves. I don't have much confidence distinguishing the two species. In the Jepson key they are distinguished by their fruits.

Shepherd's Needle *

Scandix pecten-veneris

Apiaceae (Carrot)

PPT: Peak

Naturalized annual, occasional on Leg 4. Easily distinguished from Bur Chervil and Field Hedge Parsley by its larger white petals.

Hartweg's Tauschia
Tauschia hartwegii
Apiaceae (Carrot)
PPT: Early
This native perennial is my favorite member of the Carrot family. The inflorescence is nothing special but the leaves are to die for. Fairly common on all four legs. Starts blooming in March and continues into April, but the deep green leaves are what sets my hear aflutter.

Field Hedge Parsley *
Torilis arvensis
Apiaceae (Carrot)
PPT: Peak
Naturalized annual, occasional on all four legs. Similar to *Anthriscus caucalis* but with a denser inflorescence.

APOCYNACEAE
(6 sp.)

Spreading or Bitter Dogbane
Apocynum androsaemifolium
Apocynaceae (Dogbane)
PPT: Late
Perennial with adorable pink flowers. Routine but mainly restricted to switchback #3 on Leg 2.

Indian Hemp
Apocynum cannabinum
Apocynaceae (Dogbane)
PPT: Late
Perennial with white flowers, fairly common on Legs 1 and 4. The plants get to be chest-high.

Greater Periwinkle *
Vinca major
Apocynaceae (Dogbane)
PPT: Peak
INVASIVE, Cal-IPC rating = moderate
This perennial vine is occasional on Legs 2 and 4. The large purple flowers are strikingly beautiful, but the plant is a trouble-maker. According to the Cal-IPC website, *Vinca major* "is

rapidly spreading in most coastal counties, foothill woodlands, the Central Valley, and even desert areas. Periwinkle has escaped from garden plantings, and lowers species diversity and disrupts native plant communities. Riparian zones are particularly sensitive. Fragments of periwinkle vines can break, wash downstream, and start new invasions."

California Milkweed

Asclepias californica

Apocynaceae (Dogbane), prev. Asclepiadaceae (Milkweed)

PPT: Peak

All three HC milkweeds are perennials. This is my favorite. Touching the leaves is like petting a cat. Unfortunately, I only see a few specimens at one location on Leg 3. The plants at that location survived the Ferguson Fire but they are just holding their own, not expanding their range. If that population dies out, the sp. may be lost to Hite Cove. This sp. occurs in higher numbers along the Merced River Trail near Briceburg.

Purple Milkweed

Asclepias cordifolia

Apocynaceae (Dogbane), prev. Asclepiadaceae (Milkweed)

PPT: Peak

Unlike California Milkweed, Purple Milkweed is thriving at HC. I see some on Leg 1, lots on Legs 2 and 4.

Narrow-leaf Milkweed

Asclepias fascicularis

Apocynaceae (Dogbane), prev. Asclepiadaceae (Milkweed)

PPT: Late

Fairly abundant on Leg 1 between June and September.

ASTERACEAE

(53 sp.)

Common Yarrow

Achillea millefolium

Asteraceae (Composite, radiate)

PPT: Peak

I see this perennial sunflower every year on Leg 4 but it is not very abundant (much less abundant than Golden Yarrow). To the casual observer the composite flower heads might be mistaken for individual flowers, but if you look closely, you will see that each "flower" contains many tiny disk flowers and rays.

California Dandelion

Agoseris grandiflora
Asteraceae (Composite, ligulate)
(Not included in PPT)
Tom Reyes identified this sp. on a field trip. It looks so much like *Agoseris heterophylla* that I don't trust myself to tell them apart.

Annual Agoseris
Agoseris heterophylla
Asteraceae (Composite, ligulate)
PPT: Peak
Common on Legs 2, 3, and 4.

Spear-leaved Agoseris
Agoseris retrorsa
Asteraceae (Composite, ligulate)
PPT: Peak
Another native annual dandelion, common on Legs 2, 3, and 4. Easy to identify by the backward-pointing lobes on its basal leaves. The seed heads are almost as big as a billiard ball.

Chamomile *
Anthemis cotula
Asteraceae (Composite, radiate)
PPT: Peak
Naturalized annual. I have only encountered this species once, on Leg 1.

California Mugwort
Artemisia douglasiana
Asteraceae (Composite, disciform)
PPT: Late
Perennial. Fairly common on Legs 1 and 4.

Deltoid Balsamroot
Balsamorhiza deltoidea
Asteraceae (Composite, radiate)
PPT: Peak
Large perennial, only seen on Leg 2. The radiate flower heads of *Balsamorhiza* look a lot like *Wyethia* (Mule Ears) but the leaves are different. The leaves of Deltoid Balsamroot are heart-shaped (cordate) at the base. The leaves of Mule Ears taper to a petiole. I have never encountered Mule Ears at Hite Cove.

California Brickellbush

Brickellia californica

Asteraceae (Composite, discoid)

PPT: Late

Perennial shrub, roughly 1 m tall. Common on Legs 1 and 4. This is one of the latest HC sp. to bloom. Even when it is blooming, the pale disc flowers are rather inconspicuous.

Italian Thistle *

Carduus pycnocephalus

Asteraceae (Composite, discoid)

PPT: Late

INVASIVE, Cal-IPC rating = moderate

PPT: Peak

This invasive thistle has gotten a foothold on Legs 3 and 4 but it is not terribly abundant yet. This sp. was not present in 1985.

Bachelor's Button *

Centaurea cyanus

Asteraceae (Composite, radiate)

PPT: Peak

I have only encountered this annual species a couple of times on Leg 1. Unlike the next two species in the same genus, Bachelor's Button is not considered invasive. I love the deep blue flowers.

Tocalote *

Centaurea melitensis

Asteraceae (Composite, disciform)

PPT: Late

INVASIVE, Cal-IPC rating = moderate

Annual. A close cousin of Yellow Star Thistle. Fairly abundant on all four legs of the Hite Cove Loop. According to Cal-IPC, Tocalote "is less invasive than Yellow Star Thistle but it still spreads quickly by producing great quantities of seed if given the proper conditions." The 1985 Botti & Mendershausen plant list has Tocalote but not Star Thistle.

Yellow Star Thistle *

Centaurea solstitialis

Asteraceae (Composite, disciform)

PPT: Late

INVASIVE, Cal-IPC rating = high

Annual. Less abundant than Tocalote, but I still see it on all four legs. According to Cal-IPC, Yellow Star Thistle "is one of the most serious rangeland weeds in the state. It propagates

rapidly by seed, and a large plant can produce nearly 75,000 seeds." To tell Tocalote and Yellow Star Thistle apart, look at the spines. If the spines are < 10 mm long and purple colored, you probably have Tocalote. If the spines are > 10 mm long and straw colored, you have Yellow Star Thistle. I was afraid that both of these sp. would run rampant after the Ferguson Fire, but thus far their abundance has remained fairly stable.

Yellow Pincushion

Chaenactis glabriuscula

Asteraceae (Composite, discoid)

PPT: Peak

Annual. Common on Leg 4. On most sunflowers that have disk flowers, the disk flowers are radially symmetric. Yellow Pincushion bucks this trend. The inner disk flowers have radial symmetry, but as you move out from the center, the flowers become larger and bilaterally symmetric.

California Thistle

Cirsium occidentale ssp. *californicum*

Asteraceae (Composite, discoid)

PPT: Peak

This native perennial thistle is common on Legs 3 and 4. There have been years where do-gooders who don't know the difference between native and non-native thistles have uprooted California Thistles and left their carcasses on the ground. In 2024, Mariposa Trails posted signs at the beginning of Leg 4 explaining that California Thistle is a beneficial native plant. Since then, they have been left to grow in peace.

Common Sandaster

Corethrogyne filaginifolia

Asteraceae (Composite, radiate)

PPT: Late

An attractive perennial with yellow disk flowers, lavender rays, and silvery leaves. When I started botanizing at Hite Cove, I saw it on Leg 4 in low numbers, late in the season. Botti & Mendershausen included it in their 1985 plant list so it was present then. Since the Ferguson Fire, I have not seen any. It may have winked out. I am sorry to see it go.

Golden-Fleece

Ericameria arborescens

Asteraceae (Composite, discoid)

PPT: Late

Perennial shrub. Common on Legs 1, 2, 4.

Horseweed

Erigeron canadensis

Asteraceae (Composite, discoid)

PPT: Late

This native annual has a weedy appearance. Common on Legs 3 and 4 late in the season. The plants can get up to 2 m tall. The discoid flower heads are not very showy.

Leafy Daisy

Erigeron foliosus

Asteraceae (Composite, radiate)

PPT: Peak

An attractive perennial with yellow disk flowers, purple rays, and skinny leaves. A major presence on Leg 4.

Golden Yarrow

Eriophyllum confertiflorum

Asteraceae (Composite, radiate)

PPT: Peak

Perennial shrub, woody at the base, yellow radiate flower heads. This is a super-abundant HC wildflower, present on all four legs, esp. Legs 3 and 4.

Western Flat-topped Goldenrod

Euthamia occidentalis

Asteraceae (Composite, radiate)

PPT: Late

Perennial. Fairly common on Leg 4. Grows close to the water.

Gumweed

Grindelia camporum

Asteraceae (Composite, radiate)

PPT: Peak

Perennial. Common on all four legs, esp. Leg 3. This plant has an unusually long bloom window. It peaks in May and June but you can still find flowers late into the fall.

Sneezeweed

Helenium bigelovii

Asteraceae (Composite, radiate)

PPT: Late

Perennial. I have only seen this sp. once near HC, on June 23, 2021. The plants were growing on the opposite bank of the South Fork, close to water's edge. The spherical ball of brown disk flowers and long yellow rays left no doubt in my mind that I was seeing Sneezeweed, even though the plants were far away. Sneezeweed does not appear in the 1985 plant list.

Rosilla

Helenium puberulum

Asteraceae (Composite, radiate)

PPT: Late

I was surprised to find Rosilla blooming near my lunch spot on June 24, 2025. It was intermingling with Stream Orchids, close to water's edge. Unlike Sneezeweed, it was on the same side of the South Fork as me so I got a good look at it. I identified it from photographs after I got home. The Jepson range of Rosilla includes cSNF, but when I checked the Calflora map, there were no records in Mariposa County.

California Sunflower

Helianthus californicus

Asteraceae (Composite, radiate)

PPT: Late

Perennial. This a minor HC wildflower. I see small numbers on Leg 4 just east of Swirly Rock. The leaves and phyllaries are distinctive.

Telegraph Weed

Heterotheca grandiflora

Asteraceae (Composite, radiate)

PPT: Peak

Perennial. First spotted on Leg 1 in 2025. This plant has a long bloom window, starting as early as April and continuing into late fall.

White Hawkweed

Hieracium albiflorum

Asteraceae (Composite, ligulate)

PPT: Late

Perennial. Fairly common on Leg 2.

Smooth Cat's Ear *

Hypochaeris glabra

Asteraceae (Composite, ligulate)

PPT: Peak

INVASIVE, Cal-IPC rating = limited

Annual. Common on all four legs.

Rough Cat's Ear *

Hypochaeris radicata

Asteraceae (Composite, ligulate)

PPT: Peak

INVASIVE, Cal-IPC rating = moderate

Perennial. I have only encountered this sp. once, in May 2019 (the first year after the Ferguson Fire).

Prickly Lettuce *

Lactuca serriola

Asteraceae (Composite, ligulate)

PPT: Late

Annual. Occasional on all four legs. Cal-IPC does not deem this species invasive.

Goldfields

Lasthenia californica (and *gracilis*?)

Asteraceae (Composite, radiate)

PPT: Early

Annuals. Present on all four legs, esp. Leg 4. The more diminutive Goldfields are probably *Lasthenia californica*. I am guessing that the larger, robust Goldfields that I see along Hwy. 140 are *L. gracilis*, but I'm not sure.

Tidy Tips

Layia platyglossa

Asteraceae (Composite, radiate)

PPT: Peak

Annual. I never noticed this sp. until 2025, when lots of them sprung up on Leg 1.

Stillman's Tickseed

Leptosyne stillmanii

Asteraceae (Composite, radiate)

PPT: Early

Annual. Occasional on Leg 4. Easily distinguished from the much more abundant Goldfields and Foothill Sunburst by its phyllaries and leaves.

Sierra Lessingia

Lessingia leptoclada

Asteraceae (Composite, discoid)

PPT: Late

This annual is one of the most abundant HC wildflowers – but you wouldn't know it if you limit your visits to March, April, & May. Lessingia doesn't start blooming until late May or early June. The plants then are pretty small and easy to overlook. Come August, Lessingia is the #1

wildflower. You will find it on all four legs, esp. Leg 2. The plants get to be chest-high and are loaded with small purple flowers. Lessingia continues to bloom into late fall but August is its high point.

Narrowleaf Cottonrose *
Logfia gallica
Asteraceae (Composite, disciform)
PPT: Peak
Annual. Uncommon.

Common Madia
Madia elegans
Asteraceae (Composite, radiate)
PPT: Peak
This annual is a major HC wildflower on all four legs. It seems to have two bloom windows. The first bloom window peaks in April and May. The plants then are typically waist-high. After those plants have gone to seed, I often see a second wave in the summer and fall, esp. near the Lower Mine. The second wave plants tend to be taller, often taller than me. I considered the possibility that the second wave plants were a different species, but nothing about them was outside the Jepson description of *M. elegans*. A minor mystery, probably not important.

Slender Tarweed
Madia gracilis
Asteraceae (Composite, radiate)
PPT: Peak
This annual is smaller and much less abundant than Common Madia.

Cleveland's Dandelion
Malacothrix clevelandii
Asteraceae (Composite, ligulate)
PPT: Ferguson
Annual. This is one of a handful of sp. that I only saw in 2019, the first year after the Ferguson Fire. It did not persist into subsequent years.

Pineapple Weed
Matricaria discoidea
Asteraceae (Composite, discoid)
PPT: Peak
Annual. Common on Leg 1.

Q-tips

Micropus californicus
Asteraceae (Composite, disciform)
PPT: Peak
Annual. Common on Legs 2, 3, and 4.

Foothill Sunburst
Pseudobahia heermannii
Asteraceae (Composite, radiate)
PPT: Early
This annual is one of the most common HC wildflowers. The radiate flower heads look very similar to Goldfields, but the leaves are different. Goldfields have linear leaves. Foothill Sunburst has pinnately lobed leaves. In my experience, Foothill Sunburst is more widespread at HC than Goldfields. The two species often grow intermingled, but if I check specimens at random locations, they are most often *Pseudobahia*.

California Everlasting
Pseudognaphalium californicum
Asteraceae (Composite, disciform)
PPT: Peak
Annual or perennial with white disciform flower heads and sticky herbage. Common on Legs 3 and 4. "Everlasting" refers to the fact that the dry, papery bracts/phyllaries persist long after flowering. Often used in floral displays.

Jersey Cudweed *
Pseudognaphalium luteoalbum
Asteraceae (Composite, disciform)
PPT: Early
Annual with pale disciform flower heads. Seen infrequently on Leg 4.

California Chicory
Rafinesquia californica
Asteraceae (Composite, ligulate)
PPT: Peak
Annual with white ligulate flowers and clasping leaves. Fairly common on Leg 4.

Shrubby Butterweed
Senecio flaccidus var. *douglasii*
Asteraceae (Composite, radiate)
PPT: Late
Large shrub with yellow radiate flower heads. Common on Legs 1 and 3.

Common Groundsel *

Senecio vulgaris

Asteraceae (Composite, discoid)

PPT: Early

Weedy-looking annual with tight composite heads containing 50 or more disk flowers. This is the first Asteraceae to bloom at HC, often as early as mid-February. Another common name is "Old Man in the Spring" – because this plant is already producing seeds before most other plants have even formed flower buds. It's not native; it's not very attractive; but I admire its determination.

Milk Thistle *

Silybum marianum

Asteraceae (Composite, discoid)

PPT: Peak

INVASIVE, Cal-IPC rating = limited

Annual or Perennial. Common in the settlement area. Not included in 1985 plant list.

Canada or Meadow Goldenrod

Solidago elongata

Asteraceae (Composite, radiate)

PPT: Late

Perennial with yellow radiate flower heads. Fairly common on Leg 4, often growing close to *Euthamia occidentalis*.

Sow Thistle *

Sonchus oleraceus

Asteraceae (Composite, ligulate)

PPT: Peak

Annual with yellow ligulate flower heads. Fairly common in the settlement area. Not considered invasive.

Whiteplume Wirelettuce

Stephanomeria exigua ssp. *macrocarpa*

Asteraceae (Composite, ligulate)

PPT: Late

Annual with white ligulate flower heads. Seen infrequently on Legs 3 and 4. Recurved outer phyllaries distinguish this minor sp. from the much more common Wand Wirelettuce.

Wand Wirelettuce

Stephanomeria virgata ssp. *pleurocarpa*

Asteraceae (Composite, ligulate)

PPT: Late

Annual with pink ligulate flower heads and appressed outer phyllaries. This a major wildflower on Legs 3 and 4 in summer and fall. It usually starts blooming in July, dominates all other sp. in September, and continues into late fall. You can still find it blooming in November or even December. Plants can exceed 2 m in height.

Eaton's Aster

Symphyotrichum bracteolatum

Asteraceae (Composite, radiate)

PPT: Late

I encountered this perennial aster in October 2025 while I was hunting for Foothill Jepsonia. The crowded flower heads have yellow disk flowers and pale lavender rays. Asters are not common in the Central Sierra foothills. *S. bracteolatum* was the best fit I could find. Botti & Mendershausen included this sp. in their 1985 plant list under its old name, *Aster eatonii*.

Yellow Salsify or Goat's Beard *

Tragopogon dubius

Asteraceae (Composite, ligulate)

PPT: Late

Perennial with yellow flower heads and phyllaries that extend well past the rays. Common in the settlement area. I mentioned that the seed heads of Spear-leaved Agoseris are as big as a billiard ball. The seed heads of Goat's Beard are even bigger – roughly the size of a softball.

Silver Puffs

Uropappus lindleyi

Asteraceae (Composite, ligulate)

PPT: Peak

Annual with yellow ligulate flower heads, phyllaries that extend just beyond the rays, grass-like leaves, and eye-catching silvery seed heads that give it the common name Silver Puffs. Common on all four legs.

BORAGINACEAE

(5 sp.)

Pacific Hound's Tongue

Adelinia grandis (prev. *Cynoglossum grande*)

Boraginaceae (Borage)

PPT: Peak

Perennial with sky-blue flowers. Common on Leg 2.

Fiddleneck
Amsinckia intermedia
Boraginaceae (Borage)
PPT: Early
Annual with orange flowers. Common on all legs.

Beaked Cryptantha
Cryptantha flaccida
Boraginaceae (Borage)
PPT: Peak
Popcornflowers reside in two genera, *Plagiobothrys* and *Cryptantha*, the former generally having well-developed basal leaves and preferring wet habitats, the latter generally lacking basal leaves when flowering and preferring dry habitats. The only *Cryptantha* at HC that I am able to identify on my own is *flaccida*, because of the conspicuous recurved bristles on its calyx. The 1985 B&M plant list contains four other *Cryptantha sp*. that I would never be able to identify on my own.

Rusty-haired Popcornflower
Plagiobothrys nothofulvus
Boraginaceae (Borage)
PPT: Early
Hite Cove has two early-blooming Popcornflowers in the *Plagiobothrys* genus: one "large" (*nothofulvus*) and one "small" (*tenellus*). *nothofulvus* has two field marks that make it easy to identify: rusty hairs in the inflorescence and a circumscissile cap on the developing nutlets. The circumscissile cap functions like a lid on the developing fruit. When you pull on it, it pops off in a clean circular line.

Slender Popcornflower
Plagiobothrys tenellus
Boraginaceae (Borage)
PPT: Early
I have it on good authority that the "small" *Plagiobothrys sp*. at HC is *tenellus*. This sp. does not have any dependable field marks for an amateur like me. In general, identifying Popcornflowers to species requires microscopic inspection of the seeds.

BRASSICACEAE
(15 sp.)

Mouse-ear Cress *
Arabidopsis thaliana
Brassicaceae (Mustard)

PPT: Early

Small annual with white flowers and basal rosette. Seen infrequently on Leg 4. Easily overlooked. This was the first plant species to have its genome fully sequenced. It is a popular model organism in plant biology and genetics.

Elegant Rock Cress

Boechera arcuata

Brassicaceae (Mustard)

PPT: Early

Perennial with purple flowers. In 1985, Ann. M highlighted it as one of her Top 40 HC Wildflowers. It is much less abundant now. I see it infrequently on Leg 4. Some years I don't see it at all.

Shepherd's Purse *

Capsella bursa-pastoris

Brassicaceae (Mustard)

PPT: Early

Small annual with white flowers and triangular fruits that purportedly resemble a shepherd's purse of days gone by. Common on all four legs. I have a soft spot in my heart for this non-native species. If you pull up its BONAP Distribution Map, you will see that it grows practically everywhere in the Lower 48 – from Hite Cove to the cracks in a Manhattan sidewalk. A model of adaptability and perseverance!

Brewer's Bittercress

Cardamine breweri

Brassicaceae (Mustard)

PPT: Late

Perennial with white flowers. I have only seen it a few times, always near standing or running water. It likes to keep its feet wet.

Milk Maids

Cardamine californica

Brassicaceae (Mustard)

PPT: Early

Perennial with white flowers. Ann. M highlighted it as one of her Top 40 HC Wildflowers in 1985. It is still a fairly dependable early-season wildflower on Legs 2 and 4, but not what I would call abundant.

Bitter Cress

Cardamine oligosperma

Brassicaceae (Mustard)

PPT: Early

Annual or perennial with white flowers. Fairly common on Legs 1, 2, and 4.

Whitlow Grass *

Draba verna

Brassicaceae (Mustard)

PPT: Early

Annual with *tiny* white flowers and football-shaped fruits. Abundant on Legs 2 and 4 if you're looking for belly flowers – flowers so small that you have to get down on your belly (or at least hands and knees) to see them well. In TJM1, *Draba verna* was considered to be a native species. Since then it has been demoted to naturalized, but I love it just the same.

Western Wallflower

Erysimum capitatum

Brassicaceae (Mustard)

PPT: Peak

Showy perennial with orange flowers. I see it every year on Legs 1 and 4 in low numbers.

Short-podded Mustard *

Hirschfeldia incana

Brassicaceae (Mustard)

PPT: Peak

INVASIVE, Cal-IPC rating = moderate

Biennial or short-lived perennial, native to the Mediterranean. A major presence on Leg 1. It starts blooming in April and keeps blooming late into the fall. According to Cal-IPC, Short-podded Mustard "can suppress native vegetation through rapid growth and shading and flourishes in disturbed conditions and recently burned lands. It occurs on roadsides and other disturbed habitat, in shrublands, and in grasslands." This is a HC Wildflower that I could do without.

Virginia Pepperweed

Lepidium virginicum

Brassicaceae (Mustard)

PPT: Early

Small annual with tidy basal rosette and white flowers. There may be more than one *Lepidium sp*. at Hite Cove. I'm not confident that I can tell them apart, but I think *virginicum* is one of them. Especially abundant on Leg 4 between the sandlot and the settlement area.

Tumble Mustard *

Sisymbrium altissimum

Brassicaceae (Mustard)

PPT: Peak

Annual with cream-colored flowers, thread-like upper leaves, pinnate lower leaves. Fairly common on Leg 1.

Hedge Mustard *

Sisymbrium officinale

Brassicaceae (Mustard)

Annual with yellow flowers and cauline leaves that look like the letter T. I did not include this sp. in my PPT files because I only saw it once in 2017 and I did not get good pictures.

Mountain Jewelflower

Streptanthus tortuosus

Brassicaceae (Mustard)

PPT: Peak

Annual or perennial with white tubular flowers. Common on Legs 1 and 4.

Fringepod

Streptanthus tortuosus

Brassicaceae (Mustard)

PPT: Early

Annual with tiny white flowers, purple anthers, and circular fruits. Common on all four legs. The name Fringepod derives from the fact that there are perforations or windows around the circumference of the fruits.

Tower Mustard

Turritis glabra

Brassicaceae (Mustard)

PPT: Late

Perennial with white flowers, appressed fruits, clasping stem leaves. Occasional on Legs 1 and 3.

CALYCANTHACEAE

(1 sp.)

Spicebush

Calycanthus occidentalis

Calycanthaceae (Spicebush)

PPT: Late

Shrub with red flowers and leaves that smell spicy when crushed between your fingers. Common on Legs 1 and 4.

CAMPANULACEAE

(3 sp.)

Common Bluecup

Githopsis specularioides

Campanulaceae (Bellflower)

PPT: Peak

I have only encountered this species once, on a joint field trip with the Santa Clara Valley CNPS chapter. One of their members pointed out a single specimen at our Leg 4 lunch spot. This sp. was included in the 1985 plant list so I'm guessing it was more common back then.

Sierra Threadplant

Nemacladus interior

Campanulaceae (Bellflower)

PPT: Ferguson Fire

This annual wildflower is tiny but exquisite. One of my favorites – not just from Hite Cove, but from anywhere! I never saw it at HC before the Ferguson Fire. I saw it twice in 2019, the first year after the fire. I found specimens blooming on May 28 and July 8 of that year. I have not seen it since. My understanding is that the seeds of this species wait for a fire to germinate. The plants grow, flower, spread their seeds, and die. The seeds lie dormant in the soil until the next wildfire. I am filled with awe when I reflect on the fact that the seeds of this plant are biding their time in a seed bank, right under my feet, waiting for the next wildfire to propagate the species.

I will include an excerpt from my May 28, 2019 journal entry:

"Of all the wildflowers that I met today, *Nemacladus interior* was my favorite. I saw it at Red Hills in 2016 and immediately fell in love with it – but I never found it again until today. The plant is so delicate that I almost missed it. I was stooping down to look at another plant when I noticed its wispy, branching stem... Today's specimens were in much better condition than the one I saw at Red Hills in 2016. If I knew that *Nemacladus interior* was the only wildflower that I would get to see in a 12-hour walk, I would still expend the effort to see it."

Venus's Looking Glass

Triodanis biflora

Campanulaceae (Bellflower)

PPT: Ferguson Fire

Another annual that I saw once in the first year after the Ferguson Fire (May 28, 2019). Several specimens were blooming on Leg 3, just below the Lower Mine. It did not persist into subsequent years.

CAPRIFOLIACEAE

(1 sp.)

Chaparral Honeysuckle
Lonicera interrupta
Caprifoliaceae (Honeysuckle)
PPT: Peak
Vine-like shrub with yellow flowers. Occasional on Leg 4.

CARYOPHYLLACEAE
(9 sp.)

Sticky Chickweed *
Cerastium glomeratum
Caryophyllaceae (Pink)
(Not included in PPT)
A not-very-interesting annual weed that I never bothered to photograph.

Hairy Rupturewort *
Herniaria hirsuta
Caryophyllaceae (Pink)
PPT: Peak
Prostrate annual, occasionally seen on Leg 1.

Douglas's Sandwort
Sabulina douglasii (prev. *Minuartia d*.)
Caryophyllaceae (Pink)
PPT: Peak
Annual. Fairly common on Leg 2 and 4. *Sabulina californica* may also occur at Hite Cove. If the leaves are > 5 mm long, you've probably got *douglasii.* If the leaves are < 5 mm long, you might have *californica*.

Pink Grass *
Petrorhagia dubia
Caryophyllaceae (Pink)
PPT: Peak
Annual with pretty pink flower. First seen on Leg 1 in 2025.

Sleepy Catchfly
Silene antirrhina
Caryophyllaceae (Pink)
PPT: Ferguson Fire

Annual. This is another sp. that I only saw in the first year after the Ferguson Fire. I saw it once, on May 28, 2019. It did not persist into subsequent years.

Here is an excerpt from my May 29 journal entry:

"This plant was eye-catching as well as fly-catching – even though all the flowers were gone. The greenish stems have sticky red bands at the internodes. Each red band is ~1 in. long. I took pictures of stems, leaves, and seeds and had no trouble identifying it. Yet another oddball Caryoph. The seeds resemble poppy seeds."

Windmill Pink *
Silene gallica
Caryophyllaceae (Pink)
PPT: Peak
Annual. Occasional on Legs 2 and 4.

Indian Pink
Silene laciniata ssp. *californica*
Caryophyllaceae (Pink)
PPT: Peak
Perennial with striking red flowers. Common on Legs 2 and 4. You can't miss this one!

Purple Sand Spurry *
Spergularia rubra
Caryophyllaceae (Pink)
PPT: Peak
Annual or perennial with purple flowers. First seen on Leg 1 in 2025.

Chickweed *
Stellaria media
Caryophyllaceae (Pink)
PPT: Early
Annual with white flowers. Common on all four legs.

CHENOPODIACEAE

(2 sp.)

Lamb's Quarters or Pigweed *
Chenopodium album
Chenopodiaceae (Goosefoot)
PPT: Late
Annual. Fairly common on Legs 3 and 4.

Jerusalum Oak *
Dysphania botrys
Chenopodiaceae (Goosefoot)
PPT: Late
Annual. Fairly common on Legs 3 and 4.

CISTACEAE
(1 sp.)

Bisbee Peak Rushrose
Crocanthemum scoparium
Cistaceae (Rock-rose)
PPT: Late
I first noticed this shrub on June 5, 2025. Here is an excerpt from my journal entry for that visit:
"A surprise awaited me near the end of the first Leg 3 switchback. I noticed a woody shrub, ~1 foot tall, with broom-like vertical stems and bright yellow 5-petaled flowers about the size of a dime. The shrub was growing close to the Woolly-leaf Ceanothus that I discovered on April 19. I found another specimen at the start of the second switchback and one or two more below the lower mine. The plant looked vaguely familiar but I couldn't place it. After I got home, I uploaded my photographs to iNat. iNat correctly identified the plant as Bisbee Peak Rushrose (*Crocanthemum scoparium*) in the Rock-rose family (Cistaceae). I already had this plant in my library. I saw it on the June 17, 2017 field trip to Feliciana Mountain that Alison Colwell led. At that time the scientific name was *Helianthemum scoparium*. This sp. has never been reported at Hite Cove. Its Jepson range includes nSNF but not cSNF. The plant is a perennial, like Woolly-leaf Ceanothus, so I must have walked past it in prior years without noticing it because it wasn't blooming. A Jepson note under Cistaceae says: 'Flowers open in sunshine for < 1 day.' The higher frequency of my visits this year allowed me to catch the Rushrose and Woolly-leaf Ceanothus in bloom and add them to my cumulative Hite Cove Plant List."

COMANDRACEAE
(1 sp.)

Bastard Toadflax
Comandra umbellata
Comandraceae (Bastard Toadflax)
PPT: Peak
Perennial parasitic herb with white flowers. Occasional on Legs 1 and 4.

CONVOLVULACEAE
(1 sp.)

Western Morning Glory

Calystegia occidentalis ssp. *occidentalis*

Convolvulaceae (Morning Glory)

PPT: Peak

Perennial. Common on Legs 2, 3, 4.

[NOTE: Botti & Mendershausen included *Calystegia malacophylla* in their 1985 plant list but not *C. occidentalis*. The two species are easily distinguished by their leaves. I find it hard to believe that *malacophylla* disappeared and *occidentalis* took its place.]

CRASSULACEAE

(2 sp.)

Liveforever

Dudleya cymosa

Crassulaceae (Stonecrop)

PPT: Peak

This perennial stonecrop is a major HC wildflower. It would make anyone's Top 40 list. Easy to spot on the rocky slopes of Legs 1 and 4.

Broadleaf Stonecrop

Sedum spathulifolium

Crassulaceae (Stonecrop)

PPT: Peak

Another perennial stonecrop. I only see this one on Leg 1.

CUCURBITACEAE

(1 sp.)

Manroot

Marah horrida

Cucurbitaceae (Cucumber)

PPT: Early

Perennial vine with small white flowers and spiky green fruits that resemble cucumbers. Common on Legs 1, 2, 4.

DATISCACEAE

(1 sp.)

Durango Root
Datisca glomerata
Datiscaceae (Datisca)
PPT: Late
This perennial grows in clumps on Leg 4. The plants can get over 2 m tall. Durango Root is the only member of its family in California.

ERICACEAE
(2 sp.)

Indian Manzanita
Arctostaphylos mewukka
Ericaceae (Heath)
PPT: Peak
Indian Manzanita is much less abundant than Sticky Whiteleaf Manzanita at Hite Cove but there are specimens on Leg 2. *mewukka* has a non-glandular inflorescence and much larger fruits than *viscida*. The leaves of both species are gray-green.

Sticky Whiteleaf Manzanita
Arctostaphylos viscida
Ericaceae (Heath)
PPT: Peak
Common on all four legs. Easily identified – even if you are blindfolded – by its glandular-sticky-hairy inflorescence.

EUPHORBIACEAE
(2 sp.)

Turkey Mullein
Croton setiger
Euphorbiaceae (Spurge)
PPT: Late
Prostrate annual with soft gray-green leaves and small white flowers. Common on Legs 1 and 3.

Spotted Spurge *
Euphorbia maculata
Euphorbiaceae (Spurge)

PPT: Late

Prostrate annual with dark green leaves, pink stems, and inconspicuous flowers. The leaves sometimes have spots or watermarks, but not always. I see this sp. occasionally seen in the settlement areas, close to the river.

FABACEAE

(33 sp.)

Spanish Lotus

Acmispon americanus

Fabaceae (Pea or Legume)

PPT: Late

A late-blooming annual, common on all four legs. The plants are usually fairly short with recumbent stems, but occasionally I see robust specimens up to 1 m tall with nearly vertical stems. More than once I have been fooled into thinking that the tall specimens were a new species, only to discover on closer inspection that the leaves and flowers were perfectly consistent with Spanish Lotus.

Silver Bird's Foot Trefoil

Acmispon argophyllus

Fabaceae (Pea or Legume)

PPT: Peak

Perennial with showy yellow flowers in a head-like inflorescence. Occasional on Leg 4.

Short-podded or Hill Lotus

Acmispon brachycarpus (prev. *Lotus humistratus*)

Fabaceae (Pea or Legume)

PPT: Peak

Annual with yellow flowers. Common on all four legs.

Deerweed

Acmispon glaber

Fabaceae (Pea or Legume)

PPT: Peak

Perennial with yellow flowers. Common on Legs 3 and 4.

Small-flowered Lotus

Acmispon parviflorus (prev. *Lotus micranthus*)

Fabaceae (Pea or Legume)

PPT: Peak

Annual. Common on all four legs. The flowers can be white or pink on the same plant.

Bishops's Lotus
Acmispon strigosus (prev. *Lotus s.*)
Fabaceae (Pea or Legume)
PPT: Peak
Annual with yellow flowers. Fairly common on Legs 3 and 4.

Chilean Trefoil
Acmispon wrangelianus (prev. *Lotus w.*)
Fabaceae (Pea or Legume)
PPT: Peak
Annual with yellow flowers. Much less common than Bishop's Lotus.

Congdon's Milkvetch
Astragalus congdonii
Fabaceae (Pea or Legume)
PPT: Peak
Perennial with white flowers. I saw this species on Leg 3 before the Ferguson Fire, but it was always onesie-twosie. The population exploded in 2019, the first year after the fire. Entire hillsides were covered with it. There must have been an extensive seed bank waiting to germinate after a fire. *Astragalus congdonii* is a fire follower *par excellence*.

Dwarf Loco Weed
Astragalus gambelianus
Fabaceae (Pea or Legume)
PPT: Peak
Annual. Infrequent on Leg 4.

Redbud
Cercis occidentalis
Fabaceae (Pea or Legume)
PPT: Early
This shrub or small tree is a signature plant of the Merced River Canyon. The magenta flowers appear before the leaves. The flowers are edible, slightly sweet. I often munch on them when I am botanizing in March and April.

Leather Root
Hoita macrostachya
Fabaceae (Pea or Legume)

PPT: Late

This interesting perennial grows in clumps on Leg 4. Jepson says the stems are < 2 m, but I have seen specimens that are significantly taller. The stems are hollow at the base. The spike-like raceme of purplish flowers never fills out like it does on the Lupines; only a few flowers are open at any given time. Not very photogenic.

Broad-leaved Lotus

Hosackia crassifolia

Fabaceae (Pea or Legume)

PPT: Peak

This perennial is one of my favorites in the Legume family. Fairly common on Leg 2 all the way up to Pinoche Ridge.

Perennial Sweet Pea *

Lathyrus latifolius

Fabaceae (Pea or Legume)

PPT: Peak

Perennial with large magenta flowers. I only see this species along the road at the start of Leg 2, behind Cedar Lodge and Indian Flat. I call that section of road Invasive Alley. There are lots of invasive plants there, including Tree of Heaven, Curly Dock, and Himalayan Blackberry. Cal-IPC has not yet designated *Lathyrus latifolius* an invasive species, but there is a high risk of it becoming invasive in California. The flowers of this species are huge compared to all of the other Fabaceae at Hite Cove.

Sulphur Pea

Lathyrus sulphureus

Fabaceae (Pea or Legume)

PPT: Peak

Perennial with orange flowers and a vine-like tendency to climb. Common on Legs 1, 2, 4.

Bush Lupine

Lupinus albifrons ssp. *albifrons*

Fabaceae (Pea or Legume)

PPT: Peak

This is the only HC Lupine that is a woody shrub, making it easy to identify. Common on all four legs. Specimens can exceed 1 m in height and breadth. At peak bloom in April they look spectacular!

Spider Lupine

Lupinus benthamii

Fabaceae (Pea or Legume)

PPT: Peak

Annual. Common on all four legs. Easy to identify by the linear leaflets on its palmate leaves, which resemble spider legs.

Summer Lupine

Lupinus formosus

Fabaceae (Pea or Legume)

PPT: Peak

This perennial Lupine is usually the last one to bloom. The best place to see it is in the flat area on Leg 4 where it co-occurs with Oak Violets. Occasional on Legs 1 and 3.

White-whorl Lupine

Lupinus microcarpus ssp. *densiflorus*

Fabaceae (Pea or Legume)

PPT: Peak

Annual, easy to identify by its white flowers. Common on Legs 1 and 4. The flowers are arranged in symmetrical whorls, but once the seed pods form, they all migrate to one side of the stem (like the eyes of a flounder).

Sky Lupine, Blue and White Lupine

Lupinus nanus, bicolor

Fabaceae (Pea or Legume)

PPT: Early

Other people seem to have no difficulty distinguishing these two small annual lupines, but I have given up. Even the Jepson description of *L. bicolor* includes this caveat: "Vigorous plants with larger flowers may be confused with *Lupinus nanus*."

Harlequin Lupine

Lupinus stiversii

Fabaceae (Pea or Legume)

PPT: Peak

This annual lupine is easy to identify by its pink & yellow flowers, but you won't see much of it at Hite Cove. Some years I don't see any. It is much more common around El Portal. Ann Mendershausen highlighted this sp. as one of her Top 40 Hite Cove Wildflowers in 1985. It must have been more prevalent back then.

Bur Clover *

Medicago polymorpha

Fabaceae (Pea or Legume)

PPT: Early

INVASIVE, Cal-IPC rating = limited

Annual with yellow flowers. Common on all four legs.

Annual Yellow Sweetclover *
Melilotus indicus
Fabaceae (Pea or Legume)
PPT: Peak
Another annual with yellow flowers. Occasional on Legs 1 and 2.

Black Locust *
Robinia pseudoacacia
Fabaceae (Pea or Legume)
PPT: Peak
INVASIVE, Cal-IPC rating = limited
This tree is abundant in the settlement area. It was no doubt introduced. I include it, even though it is invasive, because it is a sight to behold when it blooms. It seems that all of the trees produce their showy white flowers at the same time. I don't know it for a fact, but I'm assuming that there is some means of communication between the trees to synchronize the bloom to such an extent. Possibly through air-borne chemicals or underground connections. Whatever the reason, I am happy to tolerate this invasive tree in the settlement area. The trees were close enough to the river to survive the Ferguson Fire and they have not spread.

Indian Clover
Trifolium albopurpureum
Fabaceae (Pea or Legume)
PPT: Peak
Annual with purple flowers, no involucre, and a "fuzzy" appearance. Abundant on Legs 3 and 4.

Foothill or Tree Clover
Trifolium ciliolatum
Fabaceae (Pea or Legume)
PPT: Peak
Annual with purple flowers, no involucre, glabrous stem. Common on all four legs.

Little Hop or Shamrock Clover *
Trifolium dubium
Fabaceae (Pea or Legume)
PPT: Peak
Annual with small yellow flowers. Common on all four legs.

Rose Clover *

Trifolium hirtum
Fabaceae (Pea or Legume)
PPT: Peak
INVASIVE, Cal-IPC rating = limited
Annual with pink flowers. Forms large dense patches on Leg 1. Occasional on Leg 4.

Small-headed Clover
Trifolium microcephalum
Fabaceae (Pea or Legume)
PPT: Peak
Annual. Occasional on Leg 4. Easy to identify by its bowl-shaped involucre and hairy herbage.

Creek Clover
Trifolium obtusiflorum
Fabaceae (Pea or Legume)
PPT: Peak
Annual with purple flowers and a wheel-shaped involucre. Occasional in wet years on Legs 1 and 4, close to standing water. In dry years I don't see any.

White-tipped Clover
Trifolium variegatum
Fabaceae (Pea or Legume)
PPT: Peak
Annual with purple flowers, wide leaflets, and an involucre. Occasional on all four legs.

Tomcat Clover
Trifolium willdenovii
Fabaceae (Pea or Legume)
PPT: Peak
Annual with purple flowers, narrow leaflets, and a wheel-shaped involucre. Fairly common on all four legs.

Common Vetch *
Vicia sativa ssp. *sativa*
Fabaceae (Pea or Legume)
PPT: Peak
Annual with flowers in small clusters. The flowers are bicolored with a light pink banner and darker wings. Occasional on Legs 1 and 4.

Winter Vetch *

Vicia villosa ssp. *varia*

Fabaceae (Pea or Legume)

PPT: Peak

Annual with purple flowers in a raceme and long pinnate leaves. Common on Leg 1, occasional on Leg 4.

GERANIACEAE

(4 sp.)

Filaree *

Erodium botrys, brachycarpum

Geraniaceae (Geranium)

PPT: Early

Both of these annual Filarees occur at Hite Cove. They both have overlapping pink petals and leaves that are lobed or dissected but not fully pinnate. They are much less abundant than *Erodium cicutarium*.

Red-stemmed Filaree *

Erodium cicutarium

Geraniaceae (Geranium)

PPT: Early

INVASIVE, Cal-IPC rating = limited

This by far the most abundant Filaree at Hite Cove. It has fully pinnate leaves, non-overlapping pink petals, and spines at the tips of the sepals.

Cutleaf Geranium *

Geranium dissectum

Geraniaceae (Geranium)

PPT: Peak

Annual with pink flowers and deeply lobed leaves. Much less common than *G. molle* at Hite Cove.

Dove's-foot Geranium *

Geranium molle

Geraniaceae (Geranium)

PPT: Peak

Annual or perennial with pink flowers and shallowly lobed leaves. Common on Legs 1 and 4.

GROSSULARIACEAE

(1 sp.)

Sierra Gooseberry
Ribes roezlii
Grossulariaceae (Gooseberry)
PPT: Early
Shrub with red tubular flowers. Occasional on Leg 2.

HYDRANGEACEAE
(1 sp.)

Mock Orange
Philadelphus lewisii
Hydrangeaceae (Hydrangea)
PPT: Peak
Shrub with exquisitely fragrant white flowers. Fairly common on Leg 4. This species was once considered to be part of the Saxifrage family. TJM1 placed it in its own family, Philadelphaceae. TJM2 moved it to its current family, Hydrangeaceae. The scientific name remained the same throughout this family drama.

HYDROPHYLLACEAE
(10 sp.)

Whispering Bells
Emmenanthe penduliflora
Hydrophyllaceae (Waterleaf)
PPT: Ferguson Fire
Annual with yellow flowers. This is another example of a fire follower that lets its seeds lie dormant in the soil until fire triggers germination through heat or chemical compounds in the smoke and ash. I never saw this sp. until the year after the Ferguson Fire. I saw it blooming three times in 2019 (April 23, May 28, July 8). It was amazing to witness the ephemeral bloom of delicate yellow flowers on the blackened landscape. I saw it once more in 2021 at much lower abundance (April 15). No sightings since then. The seeds are in the bank, waiting for the next fire.

Yerba Santa
Eriodictyon californicum
Hydrophyllaceae (Waterleaf)
PPT: Peak

This shrub is a major chaparral component at Hite Cove. Super-abundant on Legs 2, 3, and 4. I decided to leave it in Hydrophyllaceae even though it recently got moved to Namaceae.

Varied-leaf Nemophila
Nemophila heterophylla
Hydrophyllaceae (Waterleaf)
PPT: Early
Annual with small white flowers and leaves that resemble the pieces of a jigsaw puzzle. Common on Legs 1, 2, 4,

Baby Blue-Eyes
Nemophila menziesii
Hydrophyllaceae (Waterleaf)
PPT: Early
Annual with "baby blue" flowers. Locally abundant on Leg 4, especially the flat area where Oak Violets and Summer Lupine grow. Occasional on Leg 1.

Caterpillar Phacelia
Phacelia cicutaria
Hydrophyllaceae (Waterleaf)
PPT: Peak
Annual up to 60 cm tall with white flowers and deeply lobed leaves. Common on all four legs.

Foothill or Rock Phacelia?
Phacelia egena
Hydrophyllaceae (Waterleaf)
(Not included in PPT)
This perennial Phacelia has been reported at Hite Cove and I have probably seen it, but I'm not sure. It resembles *P. imbricata*. but it doesn't grow as tall. Jepson gives a maximum height of 60 cm for *egena*, 120 cm for *imbricata*.

Varied-leaf Phacelia?
Phacelia heterophylla var. *virgata*
Hydrophyllaceae (Waterleaf)
(Not included in PPT)
This is another perennial Phacelia that I might have seen once or twice at Hite Cove, but I'm not sure. It has a dominant central stem and a long inflorescence, in contrast to *P. imbricata* which usually has multiple stems of similar length emerging from the base of the plant and a shorter inflorescence.

Imbricated Phacelia

Phacelia imbricata

Hydrophyllaceae (Waterleaf)

PPT: Peak

This perennial white-flowered Phacelia has a lot in common with *P. egena* but it grows taller. I believe that *cicutaria* and *imbricata* are the dominant white-flowered Phacelias at Hite Cove.

Mariposa Phacelia

Phacelia vallicola

Hydrophyllaceae (Waterleaf)

PPT: Peak

Small annual with purple flowers. Fairly common on Leg 4, often growing out of cracks in the rocks.

Blue Fiesta Flower

Pholistoma auritum

Hydrophyllaceae (Waterleaf)

PPT: Peak

Annual with purple flowers and lobed clasping leaves, often forming large masses in shady spots. The leaves and stems are covered with prickles that cause the leaves to stick to your clothes like Velcro. Common on Legs 1, 2, 4.

HYPERICACEAE

(2 sp.)

Goldwire

Hypericum concinnum

Hypericaceae (St. John's Wort)

PPT: Peak

Perennial. Occasionally seen on Legs 2, 3, 4. Much less common than Klamath Weed. To tell the two apart, look at the leaves. The leaves of Goldwire are folded into a V, forming a trough, and they lack clear dots on the underside. The leaves of Klamath Weed might have the edges rolled under but they are not folded, and they have conspicuous clear dots on the lower surface.

Klamath Weed *

Hypericum perforatum

Hypericaceae (St. John's Wort)

PPT: Peak

INVASIVE, Cal-IPC rating = limited

Perennial. Common on all four legs. (A hundred times more common than Goldwire. Use the leaves to tell them apart.)

LAMIACEAE
(7 sp.)

Clasping Henbit or Giraffe Head *
Lamium amplexicaule
Lamiaceae (Mint)
PPT: Early
Small annual with purple flowers. Common on Legs 1, 2, 4.

White Pitcher Sage
Lepechinia calycina
Lamiaceae (Mint)
PPT: Late
Medium-sized shrub with white tubular flowers. Common on Leg 2.

Horehound *
Marrubium vulgare
Lamiaceae (Mint)
PPT: Peak
Perennial with small white flowers in head-like inflorescences in the leaf axils. Common on Legs 3 and 4. In 2025 I found specimens growing just inside the entrance to the upper mine that kept blooming into November and even December. In sun-drenched areas the flowers are finished by the end of June.

Coyote Mint
Monardella sheltonii or villosa?
Lamiaceae (Mint)
PPT: Late
Perennial with purple flowers. Common on Legs 2 and 4. The Central Sierra lies outside the Jepson range of both candidate species, but I think it has to be one or the other. Leaf shape favors *sheltonii*.

Skullcap
Scutellaria siphocampyloides
Lamiaceae (Mint)
PPT: Peak
Perennial with blue flowers. Fairly common on Leg 4. Botti & Mendershausen include another Skullcap, *Scutellaria tuberosa*, in their 1985 HC plant list, but I have never been able to find it.

Whitestem Hedgenettle
Stachys albens
Lamiaceae (Mint)
PPT: Late
Tall perennial with white flowers. Common on Leg 4, usually in wet areas.

Vinegar Weed
Trichostema lanceolatum
Lamiaceae (Mint)
(Not included in PPT)
Late blooming perennial with purple flowers and a strong, vinegary scent. I only encountered this sp. once, in September 2019, but I didn't take pictures.

LAURACEAE
(1 sp.)

California Laurel
Umbellularia californica
Lauraceae (Laurel)
PPT: Early
Tree with conspicuous yellow flowers and fruits that resemble miniature avocados. (The avocado tree is in the same family.) Common on Legs 1, 2, 4.

LILIACEAE
(3 sp.)

White Globe Lily or Fairy Lantern
Calochortus albus
Liliaceae (Lily)
PPT: Peak
Perennial with white flowers that point down. Adorable! Common on Legs 1, 2, 4.

Mariposa Lily
Calochortus venustus
Liliaceae (Lily)
PPT: Peak
Perennial with conspicuous flowers that can be white or various shades of pink. The only Mariposa Lily that I see at Hite Cove is *venustus*. To confirm the species, check the shape of the nectary at the base of the petals. *C. venustus* has a square nectary. An otherwise similar Mariposa

Lily, *C. superbus*, has a nectary that looks like an upside-down V. (At Red Hills, *superbus* is the dominant species.)

Brown Bells
Fritillaria micrantha
Liliaceae (Lily)
PPT: Peak
Perennial, up to 1 m tall, with brown flowers that point down. Occasional on Legs 2 and 4. It is easy to walk right past this plant without noticing the flowers because their color blends in so well with the surroundings.

LIMNANTHACEAE
(1 sp.)

White Meadowfoam
Limnanthes alba
Limnanthaceae (Meadowfoam)
PPT: Peak
Annual. Uncommon at Hite Cove. I only see it in wet years, and even then, not very much. I am guessing that the sp. I see is *alba*.

LINDERNIACEAE
(1 sp.)

False Pimpernel
Lindernia dubia
Linderniaceae (False Pimpernel)
PPT: Late
Small annual with adorable white flowers. I detected it for the first time in August 2025 near a place where I often stop to eat lunch. It was growing within a meter of the South Fork, below the spring high water mark. You will need to brave the summer heat to have a shot at this species.

LOASACEAE
(1 sp.)

Blazing Star
Mentzelia crocea
Loasaceae (Stickleaf)
PPT: Peak

Annual or perennial with *spectacular* yellow flowers. This is my favorite Hite Cove wildflower. Blazing Star is a good name, but I would go even farther and name it Supernova. It blooms every year at the same location on Leg 4. The center of gravity of the population is roughly half a mile from Redbud Lodge. In wet years, it expands its range on both sides of this "home" location. I remember the first time that I saw this wildflower in 2015 – my first year of botanizing at Hite Cove. Here are my journal notes from that visit.

Monday, April 13, 2015

Nature granted me two special treats today. The first was a single, large, perfectly-formed Mariposa Lily, sticking right out into the trail at the 0.75 mile mark, – begging to be noticed, fearless of getting stepped on. I have seen this flower many times before, but it stood out as the only lily I saw today. My second treat was the Blazing Star. As noted in my Bagby Field Trip notes, the Brecklings pointed out the Blazing Star to me from their moving car along Hwy. 49. Most likely, mine eyes have received photons from this species many times previously, without my *seeing* it. Now that the flower's form was imprinted in my mind, I noticed one out of the corner of my eye growing downslope in a steep wash. Then two more upslope in the same wash. I carefully approached the upslope flowers, to admire them and take their picture. A proof of HDT's dictum, "There is just as much beauty visible to us in the landscape as we are prepared to appreciate, – not a grain more."

MALVACEAE

(1 sp.)

Cheeseweed Mallow *****

Malva parviflora

Malvaceae (Mallow)

I did not include this sp. in my PPT files because I only saw it once in the first year after the Ferguson Fire (April 23, 2019). There is no love lost between me and this plant. I have been trying for years to eradicate it from my backyard in Merced. Even though technically it is an annual, it has an uncanny ability to re-establish itself from root fragments if even small pieces of root are left behind during weeding. I will be glad if I never see this plant again at Hite Cove.

MOLLUGINACEAE

(1 sp.)

Green Carpetweed *****

Mollugo verticillata

Molluginaceae (Carpetweed)

PPT: Late

Prostrate annual with white flowers. Occasional on Leg 4, usually close to water.

MONTIACEAE

(3 sp.)

Red Maids
Calandrinia menziesii
Montiaceae (Miner's Lettuce)
PPT: Early
Annual with deep red flowers. Common on Leg 4.

Narrow-leaved Miner's Lettuce
Claytonia parviflora
Montiaceae (Miner's Lettuce)
PPT: Early
Annual with white flowers and linear basal leaves. Much less common than *perfoliata.*

Miner's Lettuce
Claytonia perfoliata
Montiaceae (Miner's Lettuce)
PPT: Early
Annual with white flowers and basal leaves with roundish leaf blades. Abundant on all four legs.

MYRSINACEAE
(1 sp.)

Scarlet Pimpernel *
Lysimachia arvensis
Myrsinaceae (Myrsine)
PPT: Peak
To a purist, this annual is non-native / alien / naturalized / introduced. Nevertheless, I love it more than many of our native species. The flowers have orange petals with a touch of purple in the throat, and yellow anthers. If a human being dressed in orange, yellow, and purple for a special social event, it simply wouldn't work. When Scarlet Pimpernel does it, the result is stunning. I only see this species in the settlement area, where Legs 3 and 4 meet. No doubt the settlers brought it with them. I would do the same. Long live Scarlet Pimpernel!

OLEACEAE
(1 sp.)

Two-petaled Ash
Fraxinus dipetala
Oleaceae (Olive)

PPT: Peak

This is a common shrub or small tree on Leg 2. When they are not blooming, they are easy to undercount or overlook entirely. If you catch *dipetala* at peak bloom, you might be shocked (as I was) at how many specimens there are along Leg 2. In 2025, I was fortunate to witness peak bloom on April 12. The dense inflorescences of white two-petaled flowers were spectacular to behold. The bloom window is short, and all of the trees seem to pop at the same time, so it's hit or miss if you will catch the bloom unless you live closeby and can visit every week.

ONAGRACEAE

(13 sp.)

Hairy Suncup

Camissoniopsis hirtella

Onagraceae (Evening Primrose)

PPT: Ferguson Fire

This annual is one of the species that I only saw in 2019, the first year after the Ferguson Fire. I saw it on April 28 and May 28 of that year. Lynn Robertson helped me to identify it from photographs.

Farewell-to-Spring

Clarkia dudleyana

Onagraceae (Evening Primrose)

PPT: Peak

There are six Hite Cove Clarkias, all of them annuals with pink or purple flowers. *dudleyana* is by far the most abundant. If you visit in May, you will see it on all four legs, especially on Leg 4 where it can carpet hillsides. Many Clarkias claim the common name "Farewell-to-Spring", but I reserve the name for *dudleyana*.

California Gaura

Clarkia heterandra

Onagraceae (Evening Primrose)

PPT: Peak

This is the smallest of the Hite Cove Clarkias. It used to be in the genus *Gaura*, hence the common name. It is fairly common on Legs 1, 2, and 4, but easily overlooked because of its small size. When I find a specimen, I sometimes stop and visit for a spell. I love the miniature flowers and the spherical green fruits.

Merced Clarkia (CRPR 1B.1)

Clarkia lingulata

Onagraceae (Evening Primrose)

PPT: Peak

This Clarkia is endemic to California. It has a California Rare Plant Rank of 1B.1, meaning that it is rare, threatened, or endangered. To protect the plant, I will not disclose the precise location.

Purple Clarkia
Clarkia purpurea
Onagraceae (Evening Primrose)
PPT: Peak
Occasional on Legs 3 and 4.

Elegant Clarkia
Clarkia unguiculata
Onagraceae (Evening Primrose)
PPT: Peak
This is the second most common HC Clarkia after *dudleyana*. Common on all four legs but at much lower density than *dudleyana*.

Diamond Clarkia
Clarkia rhomboidea
I did not include this species in my 2015-2025 Plant List or PPT files because I have never encountered it at Hite Cove. I mention it here because Ann Mendershausen highlighted it as one of the Top 40 Hite Cove Wildflowers in the 1985 booklet. It has either winked out or dramatically dropped in abundance.

Fort Miller Clarkia
Clarkia williamsonii
Onagraceae (Evening Primrose)
PPT: Peak
Occasional on Legs 1 and 4, sometimes forming dense patches.

Tall Annual Willowherb
Epilobium brachycarpum
Onagraceae (Evening Primrose)
PPT: Late
Tall annual with pink flowers. Occasional on Leg 1.

California Fuchsia
Epilobium canum (prev. *Zauschneria californica*)
Onagraceae (Evening Primrose)
PPT: Late
Perennial with bright red tubular flowers. Common on Leg 4 from July to October.

Northern or Fringed Willowherb
Epilobium ciliatum
Onagraceae (Evening Primrose)
PPT: Late
Perennial with white or pink flowers. Occasional on Leg 4.

Denseflower Willowherb
Epilobium densiflorum
Onagraceae (Evening Primrose)
PPT: Late
Annual, usually with pink flowers. Occasional on Leg 4.

Hooker's Evening Primrose
Oenothera elata ssp. *hirsutissima*
Onagraceae (Evening Primrose)
PPT: Peak
Tall perennial with showy yellow flowers. Seen infrequently on Leg 1 (missing most years).

ORCHIDACEAE
(2 sp.)

Stream Orchid
Epipactis gigantea
Orchidaceae (Orchid)
PPT: Late
I was shocked when I found this gorgeous perennial orchid blooming near my lunch spot on June 24, 2025. It was half of a double surprise, the other half being Rosilla. Here is an excerpt from my journal entry for that date.

"Today's biggest surprises occurred during my lunch break. I arrived at my usual lunch spot at 11 a.m. That spot is exposed and sunny. Since it was getting hot, I moved a short distance downstream to the shade of a small tree…

As I saw down to eat, I noticed two plants growing intermingled close to the water. One was an odd-looking composite that reminded me of Sneezeweed (*Helenium bigelovii*). It had a huge number of disk flowers in a truncated spherical head, but several things didn't fit: (i) the yellow rays were extremely short – much too short for *bigelovii;* (ii) the rays had appreciable thickness, unlike the rays of dandelions and most other sunflowers, which are paper-thin; (iii) the rays were distinctly hairy; (iv) the free lanceolate phyllaries were very noticeable from above as they curled around the composite flower head. The cauline leaves were entire and clasping. (I identified this plant as Rosilla (*Helenium puberulum*) after I got home.)

The other wildflower, growing intermingled with the Rosilla, was an even bigger surprise: Stream Orchids (*Epipactis gigantea*)! I saw quite a few stems and numerous flowers in pristine condition; other flowers were starting to fade. Both species were growing on a clump of soil just a foot or two from the water, below the high water mark. Stream Orchids, like all members of the orchid family, depend on mycorrhizal fungi. I was surprised to see them at all, but I was *especially* surprised to see them growing on such a small patch of soil in an otherwise rocky area along the South Fork. I figured a fungal connection would require a larger patch of soil."

Dense-flowered Rein Orchid
Piperia elongata
Orchidaceae (Orchid)
PPT: Late
I have seen this perennial orchid three times in ten years, always on Leg 2.

OROBANCHACEAE
(7 sp.)

Clustered Broomrape
Aphyllon fasciculatum
Orobanchaceae (Broomrape)
PPT: Peak
Occasional on Leg 2.

Indian Paintbrush
Castilleja affinis
Orobanchaceae (Broomrape)
(Not included in PPT)
I think this species occurs at Hite Cove, but I when I have a specimen that I think is *affinis*, I have trouble convincing myself beyond a shadow of a doubt that it's not *applegatei*.

Wavyleaf Indian Paintbrush
Castilleja applegatei ssp*. pinetorum*
Orobanchaceae (Broomrape)
PPT: Peak
Perennial with red flowers. Common on all four legs.

Narrow-lvd Owl's Clover
Castilleja attenuata
Orobanchaceae (Broomrape)
PPT: Peak

Perennial with white & yellow flowers. Common on all four legs.

Dense-flwr Owl's Clover
Castilleja densiflora
Orobanchaceae (Broomrape)
PPT: Peak
Perennial with purple flowers. Present on all four legs. More abundant than *exserta*.

Purple Owl's Clover
Castilleja exserta
Orobanchaceae (Broomrape)
PPT: Peak
Perennial with purple flowers. Present on all four legs but less abundant than *densiflora*.

Woolly Indian Paintbrush
Castilleja foliolosa
Orobanchaceae (Broomrape)
PPT: Early
Perennial with red flowers. Common on Legs 3 and 4.

PAPAVERACEAE
(6 sp.)

Bush or Tree Poppy
Dendromecon rigida
Papaveraceae (Poppy)
PPT: Early
This shrub is a major chaparral component at Hite Cove. Super-abundant on Leg 2, abundant on Leg 3, occasional on Leg 4. This sp. proliferated after the Ferguson Fire.

Golden Eardrops
Ehrendorferia chrysantha
Papaveraceae (Poppy)
PPT: Ferguson Fire, Peak
Perennial with yellow flowers. I never saw this plant until after the Ferguson Fire. I don't think I could have missed it if it had been present before the fire, as the plants grow taller than me and they have large, dissected leaves which are obvious even when the plants are not blooming. Unlike the other fire followers, Golden Eardrops was still going strong six years after the fire. Abundant on Leg 3, occasional on Leg 4.

Foothill or Tufted Poppy

Eschscholzia caespitosa

Papaveraceae (Poppy)

PPT: Early

If I had to pick one wildflower as the emblem of Hite Cove, or of the entire Merced River Canyon, it would be an easy decision. I would choose the annual Foothill Poppy. If you book a room at the Lodge in Yosemite National Park, it is almost guaranteed that one of the pictures on the wall of your room will be Foothill Poppies blanketing a steep, rocky hillside at Hite Cove.

[NOTE: *Eschscholzia caespitosa* is ***not*** the California State Flower.]

California Poppy

Eschscholzia californica

Papaveraceae (Poppy)

PPT: Peak

This is our California State Flower. It can be an annual or a short-lived perennial. To distinguish *californica* from *caespitosa*, look for the pink flange or "donut" at the base of the flower. Surprisingly, I have never had a confirmed sighting of California Poppy on Leg 4. I only see them on Leg 1.

Cream Cup

Platystemon californicus

I did not include this species in my 2015-2025 Plant List or PPT files because I have never seen it at Hite Cove. Ann Mendershausen highlighted Cream Cups as one of the Top 40 Hite Cove Wildflowers in the 1985 booklet. Lynn Robertson informed me that she saw it in 2010. There is one record on the Calflora map near Hite Cove from 2023; it was submitted by Rhonda Allen, a member of the SJV CNPS chapter.

Matilija Poppy (CRPR 4.2)

Romneya coulteri

Papaveraceae (Poppy)

PPT: Peak

Perennial with huge white flowers. There is one patch near the start of Leg 2, just up the hill from Cedar Lodge and Indian Flat. Probably planted by a homeowner, but there are other occurrences between Cedar Lodge and El Portal.

PHRYMACEAE

(9 sp.)

All of the monkeyflowers in this section used to be in the *Mimulus* genus. None of them are abundant at Hite Cove. (There are only two that I see every year and even those are not abundant.)

Bolander's Monkeyflower

Diplacus bolanderi

Phrymaceae (Lopseed)

PPT: Peak

Annual with fairly large pink flowers. I saw small amounts of Bolander's Monkeyflower on Leg 3 before the Ferguson Fire; and in 2019, the first year after the Ferguson Fire; but since then I haven't seen any.

Congdon's Monkeyflower

Diplacus congdonii

Phrymaceae (Lopseed)

PPT: Ferguson Fire

Annual with pink flowers. This is the first of three monkeyflowers that behaved as strict fire followers at Hite Cove. I never saw it before the Ferguson Fire. I saw it twice in 2019, the first year after the fire. A modest number of specimens were blooming on Leg 4 on March 1 & March 14 of that year. I have not seen it since.

Kellogg's Monkeyflower

Diplacus kelloggii

Phrymaceae (Lopseed)

Annual with maroon flowers. I did not include this species in my 2015-2025 Plant List or PPT files because I have never seen it at Hite Cove. Ann Mendershausen highlighted Kellogg's Monkeyflower as one of her Top 40 Hite Cove Wildflowers in the 1985 booklet. Lynn Robertson informed me that she has never seen it at Hite Cove. There are no Calflora records near Hite Cove. There are many records near El Portal. It blooms every year near the NPS Warehouse.

Layne's Monkeyflower

Diplacus layneae

Phrymaceae (Lopseed)

PPT: Late

Annual with pink flowers. Infrequent on Leg 4.

Viscid Monkeyflower

Diplacus viscidus

Phrymaceae (Lopseed)

PPT: Ferguson Fire

Annual with pink flowers. The second fire follower. I saw it once in the first year after the Ferguson Fire. Here is an excerpt from my journal notes for July 8, 2019:

"The biggest treat of the day was a Monkeyflower that I had never seen before:

- NEW: Viscid Monkeyflower (*Diplacus viscidus*)

I would have been thrilled to meet even one specimen of this plant. I ended up seeing *hundreds* of specimens in Zones 3 & 4. Some of the plants were almost knee-high. Viscid Monkeyflower outnumbered all of the other monkeyflowers that I saw on today's walk. (The other species were *guttata*, *floribunda*, *layneae*, *bolanderi*, *cardinalis*, *acutidens*)."

Kings River Monkeyflower
Erythranthe acutidens
Phrymaceae (Lopseed)
PPT: Ferguson Fire
Annual with pink flowers. The third fire follower. I saw it three times in 2019, the first year after the Ferguson Fire. I detected a few specimens on Leg 2 on April 23; many specimens on Legs 2, 3, and 4 on May 28; a few stragglers on July 8. I never saw it in subsequent years.

Scarlet Monkeyflower
Erythranthe cardinalis
Phrymaceae (Lopseed)
PPT: Late
Perennial with showy red flowers. Occasional on Legs 1 and 4, but only in wet years.

Many-flowered Monkeyflower
Erythranthe floribunda
Phrymaceae (Lopseed)
PPT: Early
Annual with yellow flowers. *floribunda* and *guttata* are the only monkeyflowers that I see every year. Neither is abundant, but you will find occasional patches in wet areas on Legs 1 and 4.

Seep-spring Monkeyflower
Erythranthe guttata
Phrymaceae (Lopseed)
PPT: Early
Annual or perennial with yellow flowers.

PLANTAGINACEAE
(11 sp.)

Wiry Snapdragon
Antirrhinum vexillocalyculatum
Plantaginaceae (Plantain)
PPT: Late
Tall annual with pale pink flowers. Occasional on Leg 3. I don't see it every year.

Chinese Houses

Collinsia heterophylla

Plantaginaceae (Plantain)

PPT: Peak

Annual with white & purple flowers arranged in tiered whorls, like a pagoda. Common on Legs 1, 2, 4.

Spinster's Blue-eyed Mary

Collinsia sparsiflora

Plantaginaceae (Plantain)

PPT: Ferguson Fire and Peak

Delicate annual with blue flowers. I never noticed this species until 2019, the first year after the Ferguson Fire, but I now suspect that it was present before the fire and I simply overlooked it. The plant is limited to a short stretch of one switchback of Leg 2 where the trail passes a rock pile. Most of the specimens grow amongst the rocks, not on the trail, which is probably why I missed it for so long. Now I see it every year. I included a slide for this plant in both the Ferguson Fire and Peak season PPTs.

Tincture Plant

Collinsia tinctoria

Plantaginaceae (Plantain)

PPT: Peak

This annual looks a lot like Chinese Houses. Both have white & purple flowers arranged in tiered whorls. One way to tell them apart is to look at the freckles on the flowers. On Chinese Houses the freckles are on the banner. On Tincture Plant, the freckles are on the lip. My professional botanist friends tell me that this is an unrigorous way to tell the species apart, but I think it works pretty well. The rigorous way to tell them apart: Tincture Plant is glandular; it will even stain your fingers if you handle it. Chinese Houses is non-glandular. The bloom windows of the two species overlap but Chinese Houses starts and ends earlier. As the season progresses you will initially see only Chinese Houses, then a mix of both species, then only Tincture Plant. This is a good exercise for newbies to strengthen your plant ID skills.

Yawning Penstemon

Keckiella breviflora

Plantaginaceae (Plantain)

PPT: Peak

Shrub with mostly white flowers. Common on all four legs.

Gay Penstemon

Penstemon laetus

Plantaginaceae (Plantain)

PPT: Late

Perennial with deep blue flowers. Common on Leg 2.

California Plantain

Plantago erecta

Plantaginaceae (Plantain)

PPT: Peak

INVASIVE, Cal-IPC rating = limited

Annual with white flowers, only a few inches tall. You will see loads of it on Leg 3 if you are paying attention.

English Plantain *

Plantago lanceolata

Plantaginaceae (Plantain)

PPT: Peak

Weedy naturalized perennial. Occasional on all four legs. This is not a glamorous plant but it is fun to see the flowers marching up the spike inflorescence.

Common Speedwell *

Veronica arvensis

Plantaginaceae (Plantain)

PPT: Peak

Annual with blue flowers. I have only seen it once, on Leg 4.

Ivy-leaved Speedwell *

Veronica hederifolia

Plantaginaceae (Plantain)

PPT: Early

Another annual with blue flowers. I encountered this sp. for the first time on March 8, 2025. It was growing on Leg 1 near one of the highway pullouts. I saw it again at the same location on March 29 and April 6. TJM1 treated this as a naturalized species. It got demoted to waif and was omitted from TJM2. There were no Calflora reports of *hederifolia* in our chapter area, so I uploaded mine. NFS botanist Joanna Clines had a sighting in Madera County on April 5, 2021. Her Calflora post includes the following:

“Sierra National Forest, east of Lewis Creek and west of Deer Run Trail - these plants appeared after hazard tree removal work, likely brought in on equipment. I have botanized here year round since 2000, and had never seen this Veronica before.”

It will be interesting to see if this plant is able to propagate on its own. If it is really a waif, it should quickly die out.

Persian Speedwell *

Veronica persica

Plantaginaceae (Plantain)

PPT: Peak

Yet another non-native annual speedwell with blue flowers. Abundant in the settlement area. Probably introduced by the miners, like Scarlet Pimpernel, Black Locust, and Horehound.

POLEMONIACEA

(9 sp.)

Straggling Gilia

Allophyllum divaricatum

Polemoniacea (Phlox)

PPT: Peak

Small annual with tubular flowers. Helpful tip from *Yosemite Wildflowers*: "The corolla is distinctly two-toned, with a reddish-purple tube and pink to lavender lobes." Fairly common on Leg 4 but easy to overlook.

Dense False Gilia

Allophyllum gilioides ssp. *gilioides*

Polemoniacea (Phlox)

PPT: Peak

Similar to Straggling but with dark blue or blue-violet flowers and little color difference between the tube and the lobes. I see this species much less often than *divaricatum*.

Variableleaf Collomia

Collomia heterophylla

Polemoniacea (Phlox)

PPT: Peak

Annual with pink flowers. Occasional on Leg 4.

Globe Gilia

Gilia capitata ssp. *pedemontana*

Polemoniacea (Phlox)

PPT: Peak

Annual with a spherical inflorescence of pale blue flowers. Abundant on all four legs.

Bird's Eyes

Gilia tricolor ssp. *diffusa*

Polemoniacea (Phlox)

PPT: Early

Annual with white and purple flowers. Common on Legs 3 and 4, often forming dense displays.

True Babystars
Leptosiphon bicolor
Polemoniacea (Phlox)
PPT: Early
Annual with either white or magenta flowers (hence the name *bicolor*). Common on Legs 2, 3, 4.

Mustang Clover
Leptosiphon montanus
Polemoniacea (Phlox)
PPT: Peak
Annual. Flowers usually white with a purple dot at the base of each petal and yellow anthers. Common on Leg 4, often forming dense displays.

Slender Phlox
Microsteris gracilis
Polemoniacea (Phlox)
PPT: Early
Small annual with pink flowers. Occasional on Leg 4.

Thin-stemmed Navarretia
Navarretia filicaulis
Polemoniacea (Phlox)
PPT: Ferguson Fire
Annual with purple flowers. This is another strict fire follower that only appeared in the first year after the Ferguson Fire. I saw it once on Leg 2, on July 8, 2019.

POLYGONACEAE
(8 sp.)

Pink Spineflower
Chorizanthe membranacea
Polygonaceae (Buckwheat)
PPT: Peak
Annual with pink flowers. Common on Legs 3 and 4.

Naked-stemmed Buckwheat
Eriogonum nudum

Polygonaceae (Buckwheat)

PPT: Late

Small shrub with white flowers, easy to identify by its basal leaves which are green on top and white on the bottom. Common on all four legs.

Wand Buckwheat

Eriogonum roseum

Polygonaceae (Buckwheat)

PPT: Late

Annual. Similar to Naked-stemmed Buckwheat but with pink or yellow flowers and with more involucres on each branch of the inflorescence. Occasional on Legs 3 and 4. Much less abundant than *nudum*.

Lady's Thumb *

Persicaria maculosa

Polygonaceae (Buckwheat)

PPT: Late

Annual with pink flowers. Fairly common on Leg 4, usually close to water.

Prostrate Knotweed

Polygonum aviculare

Polygonaceae (Buckwheat)

PPT: Late

Prostrate annual or perennial. Occasional on Leg 1.

Fairy Mist

Pterostegia drymarioides

Polygonaceae (Buckwheat)

PPT: Peak

This diminutive annual buckwheat is fairly common but easily overlooked. The Brecklings call it "Botanist's Friend" – since only a botanist would pay attention to it. I see it on Leg 4.

Sheep Sorrel *

Rumex acetosella

Polygonaceae (Buckwheat)

(Not included in PPT)

Perennial. Infrequent.

Curly Dock *

Rumex crispus

Polygonaceae (Buckwheat)
PPT: Peak
INVASIVE, Cal-IPC rating = limited
Tall perennial. Common on all four legs.

PRIMULACEAE
(1 sp.)

Henderson's Shooting Star
Primula hendersonii
Primulaceae (Primrose)
PPT: Early
This early-blooming perennial would make anyone's Top 40 list of Hite Cove Wildflowers. Common on Legs 1, 2, 4.

RANUNCULACEAE
(6 sp.)

Pipestems
Clematis lasiantha
Ranunculaceae (Buttercup)
PPT: Peak
Perennial vine with white flowers and fluffy spherical seed heads. Common on Legs 2 and 4.

Hansen's Delphinium
Delphinium hansenii
Ranunculaceae (Buttercup)
PPT: Peak
Perennial larkspur with white flowers. Flowers sport green dots. Common on Legs 2 and 4, occasional on other legs.

Purple Larkspur
Delphinium nuttallianum or ?
Ranunculaceae (Buttercup)
PPT: Peak
There are several small purple larkspurs that look very much alike. I am guessing that the Hite Cove species in *nuttallianum*, but it might be something else. Fairly common on Leg 4.

Western Rue Anemone

Enemion occidentale

Ranunculaceae (Buttercup)

PPT: Early

Perennial with white flowers and ternate leaves. Locally common on Leg 4, occasional on Legs 1 and 2. Western Rue Anemone and Waterfall Buttercup are usually the earliest species to bloom at Hite Cove, often by mid-January. When I see these species blooming, I see the curtain going up on a highly anticipated play or concert.

Waterfall Buttercup

Ranunculus hystriculus

Ranunculaceae (Buttercup)

PPT: Early

Perennial with white flowers and kidney-shaped leaves. Locally common on Legs 1 and 4, always near water.

Spiny-fruit Buttercup *

Ranunculus muricatus

Ranunculaceae (Buttercup)

PPT: Peak

Annual or perennial with yellow flowers. Infrequent on Leg 2.

RHAMNACEAE

(5 sp.)

Buckbrush

Ceanothus cuneatus

Rhamnaceae (Buckthorn)

PPT: Early

One of the major chaparral shrubs at HC. Present on all four legs. Especially abundant on sun-drenched Leg 3.

Deerbrush

Ceanothus integerrimus

Rhamnaceae (Buckthorn)

PPT: Peak

This close relative of Buckbrush is another major chaparral component. It blooms a bit later and has a showier inflorescence. The flowers exude a wonderful perfume. Present on all four legs, especially Leg 2.

Woolly Leaf Ceanothus

Ceanothus tomentosus

Rhamnaceae (Buckthorn)

PPT: Peak

This species is so vastly outnumbered by other chaparral plants that I was completely unaware of it until I happened to catch it in bloom on April 19, 2025. I was heading downhill from Pinoche Ridge when I came upon several specimens of a showy blue Ceanothus that I had never seen before. The medium-sized shrubs were at peak bloom. The flowers were deep blue – bluer than the sky – and had white anthers. Specimens continued into the second switchback. I must have walked past these shrubs many times in prior years without noticing them because they weren't blooming. The bloom window is very short. When I visited again on May 4, hardly any flowers remained. When the plants are not blooming, they can be recognized by their leaves, which are shiny green on top and white woolly (tomentose) on the bottom – hence the species name. Now that I know exactly where the plants live, I recognize them and greet them even when they are not in flower. My late discovery of Woolly Leaf Ceanothus and Bisbee Peak Rushrose – both long-lived perennials – makes me wonder how many other species I have overlooked for want of flowers.

Hoary Coffeeberry

Frangula californica ssp*. tomentella*

Rhamnaceae (Buckthorn)

PPT: Peak

Chaparral shrub with rather inconspicuous yellow flowers. The plant gets its common name from its fruits, which bear a superficial resemblance to coffee beans (without the caffeine). The berries are 10-15 mm diameter. They start out green and ripen to black. Fairly common in the settlement area.

Holly-leaved Redberry

Rhamnus ilicifolia

Rhamnaceae (Buckthorn)

PPT: Peak

Chaparral shrub with small, yellowish, 4-petaled flowers and leathery leaves that resemble holly leaves. More abundant at Hite Cove than Coffeeberry, but much less abundant than Buckbrush, Deerbrush, Chamise, & Toyon. The flowers aren't much to look at, but the berries are to die for. They ripen to a deep, glistening red – much prettier than Toyon berries IMO.

ROSACEAE

(7 sp.)

Chamise

Adenostoma fasciculatum

Rosaceae (Rose)

PPT: Peak

Major chaparral shrub, easily recognized by its needle-like leaves which grow in clusters along the stems. Chamise might be the #1 shrub at Hite Cove. Only Buckbrush and Yerba Santa rival it in abundance. On my 2025 visits I practically had to bushwhack my way through chest-high stands of these three species as they took over Leg 3.

Birch-leaf Mtn. Mahogany

Cercocarpus betuloides

Rosaceae (Rose)

PPT: Peak

Chaparral shrub with small yellow flowers and long, curly, feathery fruits up to 2 inches long. The feathery part is the style of the flower. Abundant on Leg 2, occasional on Legs 1 and 4.

Sticky Cinquefoil

Drymocallis glandulosa

Rosaceae (Rose)

PPT: Peak

Perennial with yellow flowers. Occasional on Leg 2.

Toyon

Heteromeles arbutifolia

Rosaceae (Rose)

PPT: Late

This is the last of the Hite Cove chaparral shrubs to bloom. Flower buds usually don't start opening until June. The red fruits, sometimes called Christmas berries, mature in the fall and persist into winter, or even into the New Year – if the birds don't get them first. Common on all four legs.

Western Chokecherry

Prunus virginiana ssp. *demissa*

Rosaceae (Rose)

PPT: Peak

Shrub or small tree with showy racemes of white flowers. Uncommon at Hite Cove. I have only encountered it on Leg 2.

Himalayan Blackberry *

Rubus armeniacus

Rosaceae (Rose)

PPT: Peak

INVASIVE, Cal-IPC rating = high

This highly invasive plant is almost impossible to eradicate once it gets established. It has formed dense thickets in Invasive Alley at the start of Leg 2. Less abundant but still a problem

on Legs 1 and 4. As bad as this plant is, I confess that I have a soft spot in my heart for it. Every summer I pick huge numbers of Himalayan Blackberries from invasive thickets at a county park close to where I live. They taste just as good as native blackberries.

California Blackberry

Rubus ursinus

Rosaceae (Rose)

PPT: Peak

This native species is much less common than Himalayan Blackberry. I only know it from one location on Leg 4.

RUBIACEAE

(3 sp.)

California Button-willow

Cephalanthus occidentalis ssp. *californicus*

Rubiaceae (Madder)

PPT: Late

Deciduous shrub or small tree that produces spherical white flower heads about the size of a golf ball. Common on Legs 1 and 4, always close to water.

[NOTE: As an amateur botanist, I would never guess that Button-Willow is in the Madder family; just as I would never guess that Mock Orange was once in the Saxifrage family. All of the other species that I am familiar with in Rubiaceae and Saxifragaceae are small, delicate plants.]

Common Bedstraw or Cleavers

Galium aparine

Rubiaceae (Madder)

PPT: Early

Annual with small white 4-petaled flowers, leaves usually in whorls of 7, fruits covered in short, recurved hairs that make them stick to your clothes (hence the common name Cleavers). Common on all four legs.

Climbing Bedstraw

Galium porrigens

Rubiaceae (Madder)

PPT: Early

Perennial woody shrub that climbs like a vine; small yellow 4-petaled flowers, leaves usually in whorls of 4, clinging fruits. Common on all four legs but easily overlooked when it is climbing up other plants.

SAPINDACEAE
(2 sp.)

Big-leaf Maple
Acer macrophyllum
Sapindaceae (Soapberry)
PPT: Peak
I included this tree because it has a large, showy inflorescence, in addition to humongous leaves. Occasional on Legs 1 and 4. (Much more common near El Portal.) Maples used to have their own family, Aceraceae, before they got folded into the Soapberry family.

California Buckeye
Aesculus californica
Sapindaceae (Soapberry)
PPT: Peak
This California endemic tree is common on all four legs of the Hite Cove Loop and throughout much of the foothills. Buckeye used to have its own family, Hippocastanaceae, until botanists discovered that it is closely related to the Maples. In the latest Jepson taxonomy, Maples and Buckeyes both reside in the Soapberry family. Buckeye trees are "summer deciduous", meaning that they shed their leaves at the onset of summer heat. The inflorescence is a large, showy panicle that you can see from a great distance. The leaves are palmate with 5-7 leaflets. The fruits, about the size of a Clementine orange, have a leathery husk with one or two shiny nuts inside. All parts of the plant are poisonous.

SAXIFRAGACEAE
(6 sp.)

Small-flowered Alumroot
Heuchera micrantha
Saxifragaceae (Saxifrage)
PPT: Peak
Perennial. The inflorescence is a panicle containing hundreds of small, pink flowers. Common on Leg 1.

Foothill Jepsonia (CRPR 4.3)
Jepsonia heterandra
Saxifragaceae (Saxifrage)
PPT: Late
Perennial with small white flowers and wiry red stems. Occasional on the cliffs between Redbud Lodge and the one-way stoplight at the Ferguson slide. Jepsonia blooms later than any other Hite Cove wildflower, usually waiting until October to send up its flowering stalks. Flowers appear

before the leaves. Rarely, leaves and flowers are present simultaneously. The leaves persist well into the spring as long as moisture is available, but you won't find any flowers then. Peak bloom is in October! Foothill Jepsonia has a California Rare Plant Rank of 4.3, meaning that it has a Limited Distribution. The plant is mainly restricted to Amador, Calaveras, Tuolumne, and Mariposa Counties. Hite Cove is the southern end of its range.

Common Woodland Star

Lithophragma affine

Saxifragaceae (Saxifrage)

PPT: Early

L. affine is one of three perennial Woodland Stars at Hite Cove. All three have white 5-petaled flowers and basal leaves. *affine* is more common than *parviflorum* but at least ten times less common than *bolanderi*.. The petals of *affine* are divided into three lobes of roughly equal size. The hypanthium angle is acute. The basal leaves are lobed but not as deeply lobed as the leaves of *parviflorum*.

Bolander's Woodland Star

Lithophragma bolanderi

Saxifragaceae (Saxifrage)

PPT: Early

This is the dominant Woodland Star at Hite Cove. The petals can be entire, or they can be divided into 5 or more lobes or fringes. The petals never have 3 lobes. The hypanthium angle is obtuse. Common on Legs 1, 2, 4.

Smallflower Woodland Star

Lithophragma parviflorum ssp. *parviflorum*

Saxifragaceae (Saxifrage)

PPT: Early

This is the least common Woodland Star at Hite Cove. It has much in common with *affine*: 3-lobed petals, acute hypanthium angle, lobed basal leaves. The main difference is that the leaves of *parviflorum* are divided almost all the way to the base (i.e., the leaves are nearly palmate). Occasionally I see specimens where the leaves look intermediate between *affine* and *parviflorum* and I give up.

California Saxifrage

Micranthes californica

Saxifragaceae (Saxifrage)

PPT: Early

Perennial with white flowers and hairy basal leaves. Abundant on Legs 1, 2, 4. I find it amusing that California Saxifrage is one of the first Hite Cove wildflowers to appear while Foothill Jepsonia is the last – two Saxifrages serving as bookends to the year.

SCROPHULARIACEAE
(3 sp.)

California Bee-Plant
Scrophularia californica
Scrophulariaceae (Figwort or Snapdragon)
PPT: Peak
Perennial with small red flowers. Fairly common on Legs 1, 2, 4.

Woolly Mullein *
Verbascum thapsus
Scrophulariaceae (Figwort or Snapdragon)
PPT: Peak
INVASIVE, Cal-IPC rating = limited
Perennial with yellow flowers on a spike inflorescence. Common on Legs 1 and 4 with an unusually long bloom window. The inflorescence never looks "full" because each flower typically lasts only one day. Only a handful of flowers are open on any given day. Jepson gives a maximum height of 200 cm for this plant. I have seen specimens in the settlement area that are nearly 300 cm tall.

Wand Mullein *
Verbascum virgatum
Scrophulariaceae (Figwort or Snapdragon)
PPT: Peak
Another perennial with yellow flowers on a spike inflorescence. Not considered invasive. Common on Leg 1. Wand Mullein is prettier than Woolly Mullein. Dozens of flowers can be open at the same time. This sp. also has a long bloom window.

SOLANACEAE
(2 sp.)

Black Nightshade
*Solanum nigrum** or *S. americanum*
Solanaceae (Nightshade)
PPT: Late
Non-native *nigrum* and native *americanum* look very much alike. I see one or the other occasionally on Leg 4, in sandy areas not far from the river.

Purple Nightshade
Solanum xanti

Solanaceae (Nightshade)
PPT: Late
Perennial with pretty purple flowers. Fairly common on Leg 4.

STAPHYLEACEAE
(1 sp.)

Sierra Bladdernut
Staphylea bolanderi
Staphyleaceae (Bladdernut)
PPT: Peak
A California endemic tree with white tubular flowers. Common on Leg 2. The flowers produce papery 3-lobed fruit capsules that resemble bladders. Each lobe of the papery capsule contains one or two round seeds about the size of a pea. Sierra Bladdernut is the only member of its family in California.

THEMIDACEAE
(5 sp.)

Harvest Brodiaea
Brodiaea elegans
Themidaceae (Brodiaea)
PPT: Peak
Perennial with showy violet flowers. Common on all four legs, esp. Leg 4.

Twining Snake Lily
Dichelostemma volubile
Themidaceae (Brodiaea)
PPT: Peak
Perennial with pink flowers that loves to climb by twining itself over any nearby plant, even members of its own species. I once saw three Snake Lily plants twining on each other, forming a three-stranded braid. Common on Leg 4, occasional on other legs.

Blue Dicks
Dipterostemon capitatus (prev. *Dichelostemma capitatum*)
Themidaceae (Brodiaea)
PPT: Early
Perennial with flowers that are usually blue but sometimes blue-purple or white. Common on all four legs. The common name Blue **Dicks** derived from the old genus name: ***Dich****elostemma*. After the plant got moved to ***Dip****terostemon*, people started calling them Blue **Dips**.

Pretty Face
Triteleia ixioides ssp. *scabra*
Themidaceae (Brodiaea)
PPT: Peak
Perennial with eye-catching yellow flowers. Common on Legs 2 and 4.

Ithuriel's Spear
Triteleia laxa
Themidaceae (Brodiaea)
PPT: Peak
Perennial with blue or purple flowers. This is a major species near Briceburg, but I don't see much of it at Hite Cove.

VALERIANACEA
(3 sp.)

Long-spurred Plectritis
Plectritis ciliosa
Valerianacea (Valerian)
PPT: Early
Annual with pink, long-spurred flowers. Common on Legs 1, 2, 4.

White Plectritis
Plectritis macrocera
Valerianacea (Valerian)
PPT: Early
Annual with white, short-spurred flowers. Much less abundant than *ciliosa*.

Corn Salad *
Valerianella locusta
Valerianacea (Valerian)
PPT: Peak
Annual with pale flowers arranged in head-like clusters. I have only seen this plant a few times, at the same location in the settlement area.

VIBURNACEAE
(1 sp.)

Blue Elderberry

Sambucus mexicana

Viburnaceae (Muskroot)

PPT: Peak

Small tree with pinnate leaves, a flat-topped inflorescence of white flowers, and black fruits that are densely white glaucous, making them appear blue. Occasional on Legs 2 and 4.

[NOTE: This is a rare case where you're better off remembering the common name than the scientific name and family. The taxonomists have put this plant through the ringer. In TJM1 it was *Sambucus mexicana* in the Honeysuckle family (Caprifoliaceae). In TJM2 it was renamed to *Sambucus nigra* ssp. *caerulea* and placed in the Muskroot family (Adoxaceae). Then they changed the name back to *Sambucus mexicana* and moved it from Adoxacea to Viburnaceae. Evidently, Viburnaceae is an older Latin name for the Muskroot family.]

VIOLACEAE

(1 sp.)

Oak Violet

Viola purpurea ssp. *quercetorum*

Violaceae (Violet)

PPT: Peak

Perennial yellow violet. This is the only violet that I see at Hite Cove, and I only see it at one location on Leg 4. It grows in the flat area just west of Swirly Rock (which also happens to be one of the best spots for Baby Blue Eyes and Summer Lupine). This violet is holding its own but is not expanding its range.

VITACEAE

(1 sp.)

California Wild Grape

Vitis californica

Vitaceae (Grape)

PPT: Late

Vine. Common on Legs 1 and 4. The grapes are small but tasty.

ZYGOPHYLLACEAE

(1 sp.)

Puncture Vine *

Tribulus terrestris

Zygophyllaceae (Caltrop)

PPT: Late

INVASIVE, Cal-IPC rating = limited

Prostrate annual with yellow flowers and sharp, woody thorns on the fruits. Common on Leg 1. I will share a personal story that illustrates where the plant got its common name. Before I retired, I took my two kids to Merced to check out the town and U.C. Merced, to see if I wanted to live there after I retired. We rode our bikes from the place we were staying on Bear Creek Drive to the university. On the way home, I got two flat tires, and each of my kids got a slow leak in one of their tires. I can't prove it, but I suspect that "Puncture" Vine was responsible. Undissuaded by the flat tires, I retired to Merced.

THEEND