

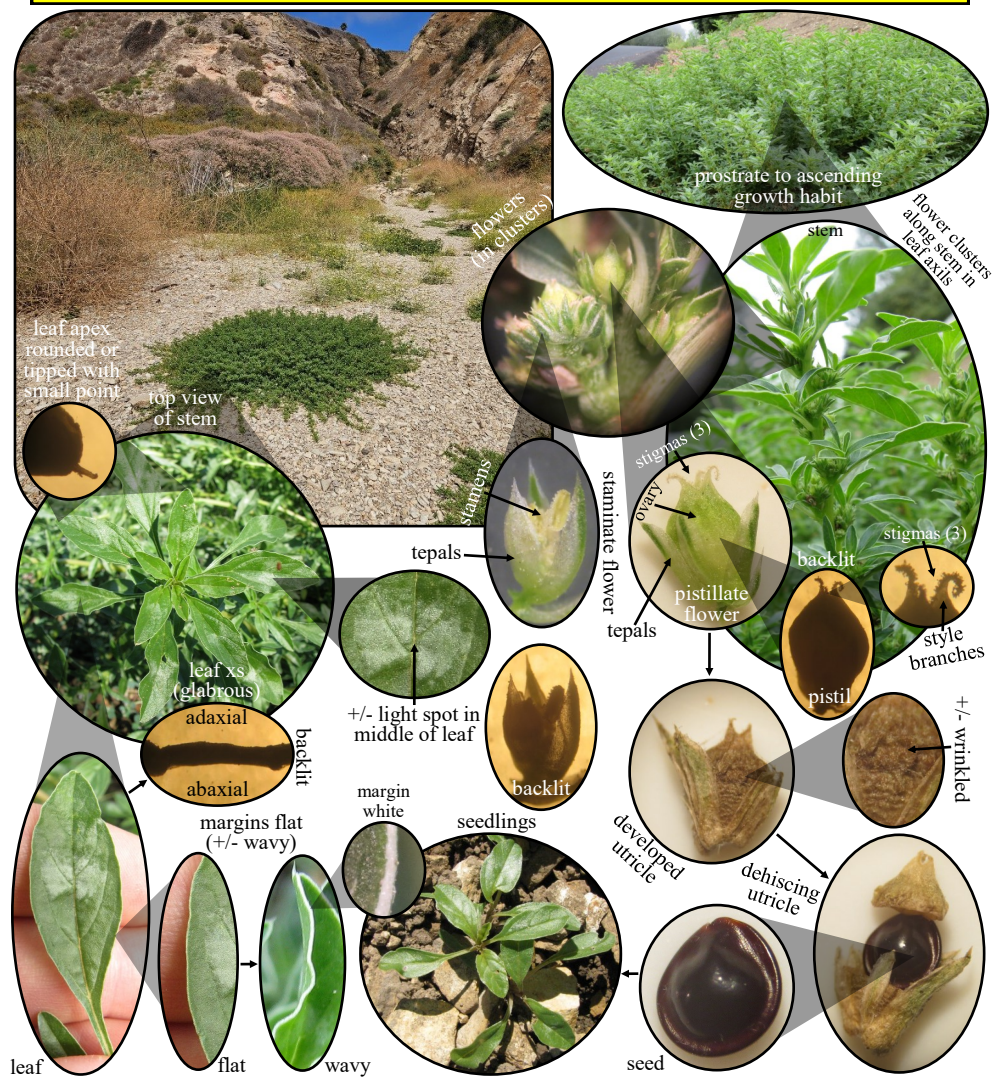
Prostrate Amaranth (*Amaranthus blitoides*)

Order: Caryophyllales

Family: Amaranthaceae (Spinach Family)

Flowers: July - November

Amaranthus blitoides is an annual herbaceous plant that is prostrate to ascending. It is found throughout the peninsula mostly in disturbed areas where it can form large mats. The overall plant is glabrous. The petiole of the leaf is usually long and the blade is obovate, elliptic, or spatulate. Leaf margins are usually entire (sometimes with white coloration), and can sometimes be undulated. The flowers are in clusters in the leaf axils and the staminate flowers are intermixed with the pistillate flowers. Staminate flowers have 3 to 4 tepals and 3 stamens. Pistillate flowers have 3 to 5 te-



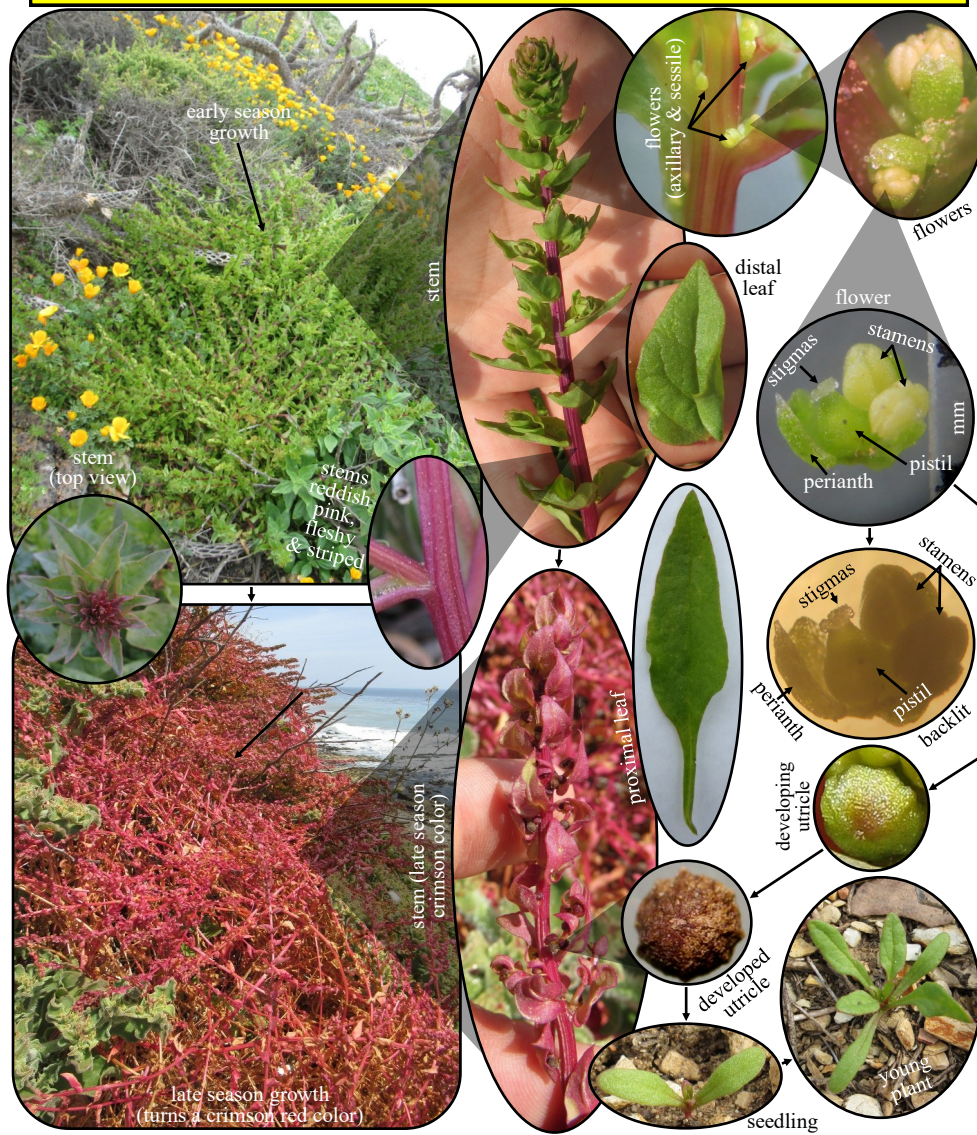
Aphanisma (*Aphanisma blitoides*)

Order: Caryophyllales

Family: Amaranthaceae (Spinach Family)

Flowers: June - September

Aphanisma blitoides is an annual herbaceous plant. It is primarily found along the coastal bluffs. Proximal leaves have petioles and are spatulate, oblanceolate, or oblong. Distal leaves are ovate-oblong to cordate-oblong, often reduced and the bases clasp the stem. Leaf margins are entire. The stems of this plant are fleshy and have a pinkish-red color with faint stripes. The bisexual flowers are found in the leaf axils. Flowers have 3 stigmas and 1 to 2 stamens. Fruit is an utricle. The seed is lenticular and has a brownish-black seed coat. This is a CNPS rare plant (CNPS ranking 1B.2).



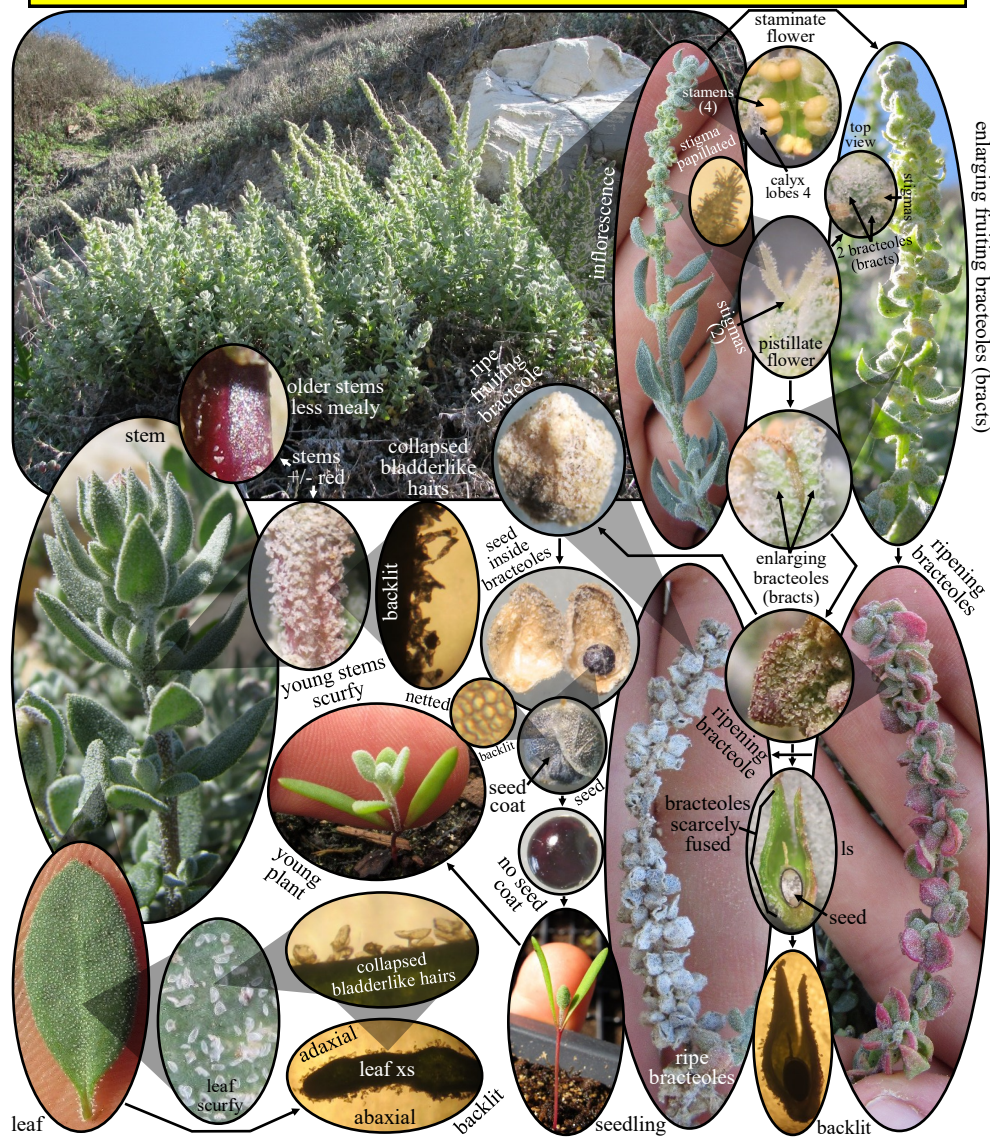
California Orach (*Extriplex californica*)

Order: Caryophyllales

Family: Amaranthaceae (Spinach Family)

Flowers: April - October

Extriplex californica is a mat to erect forming perennial herbaceous plant. It is found along the coastal bluffs on the peninsula. It is monoecious or dioecious. The overall plant is white scurfy (especially new growth and the leaves). Leaves are narrowly lanceolate. Staminate flowers are 4-merous and terminal on the inflorescence or they can be mixed with the pistillate flowers in axillary clusters. Pistillate flowers lack a calyx, have 2 stigmas, and have 2 foliaceous bracteoles (bracts). Fruiting bracteoles are sessile and are rarely united. Seed coat is papery. Seed is black and lenticular.



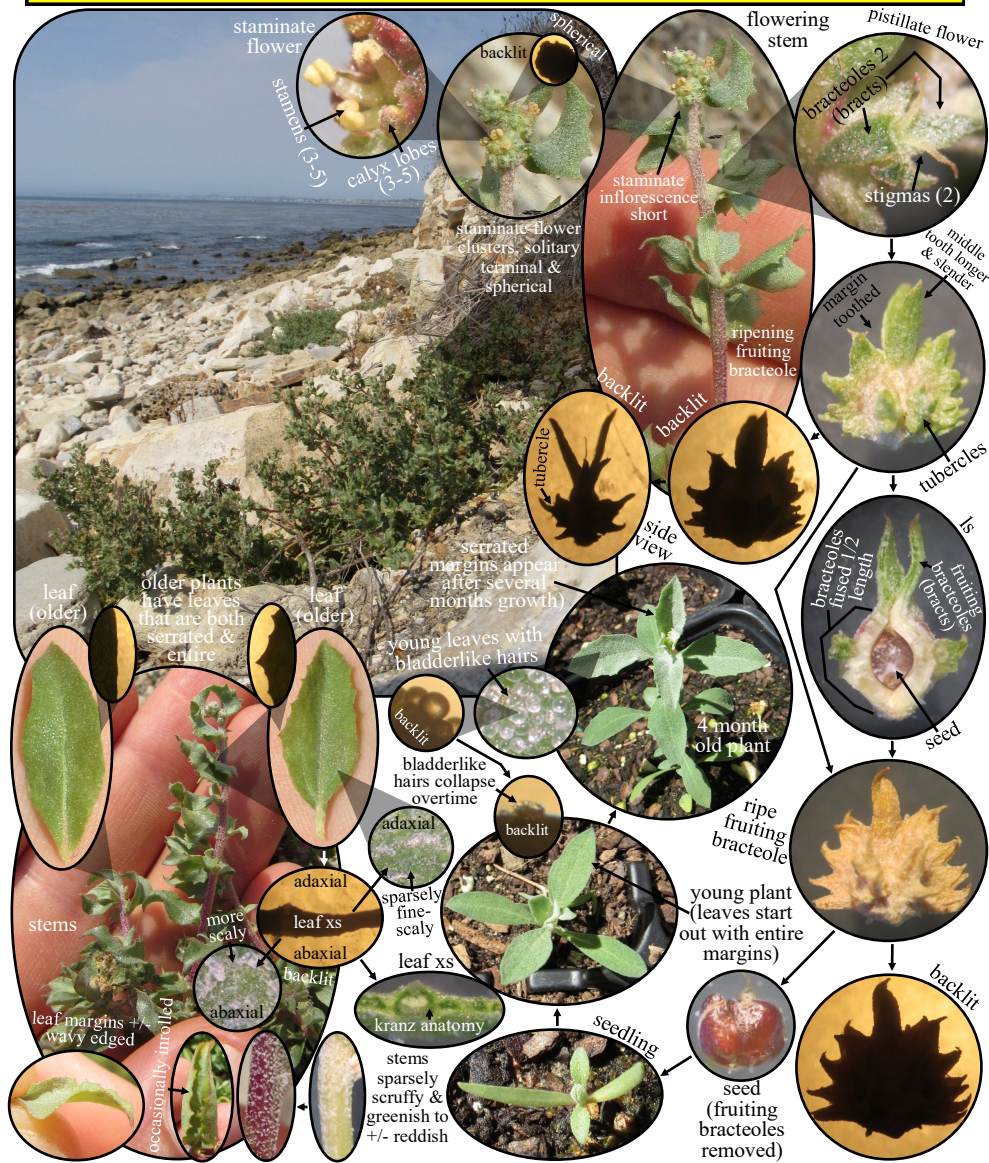
Davidson's Saltscale (*Atriplex serenana* var. *dauidsonii*)

Order: Caryophyllales

Family: Amaranthaceae (Spinach Family)

Flowers: April - October

Atriplex serenana var. *dauidsonii* is an annual herbaceous plant that is often mat-like. It is found along one section of the coastal bluffs on the peninsula. It is a CNPS rare plant (CNPS 1B.2). It is monoecious. Stems can be a greenish yellow to reddish and are scruffy. Leaves (have kranz anatomy) are elliptic to lanceolate with margins generally irregularly dentated; however, leaves with entire margins can also be produced on the same plant. Interestingly, very young plants (1-3 months) produce leaves with



Davidson's Saltscale (*Atriplex serenana* var. *davidsonii*)

Order: Caryophyllales

Family: Amaranthaceae (Spinach Family)

Flowers: April - October

entire margins but then shift to irregularly dentated leaves around 3-4 months. Older plants then have mostly irregularly dentated leaves but occasionally make entire leaves as well. New leaves have inflated bladderlike hairs that then deflate overtime making a scaly (adaxial side being less scaly than the abaxial side) surface to older leaves. Leaves can also have wavy margins and be occasionally inrolled. Staminate inflorescences are spherical, short, and only terminal. Pistillate flowers are in small clusters and axillary. Pistillate flowers have 2 stigmas and are surrounded by 2 foliaceous bracteoles (bracts). The fruiting bracteoles are fused 1/2 their length and the surface can be tuberculated or smooth. The fruiting bracteoles margins are sharply dentated (toothed) with the middle tooth longer and slender than the rest. The seed is spherical and brown. The overall plant can look quite different depending on which time of the year it is (wet season growth versus dry season growth).



wet season
growth



dry season
growth



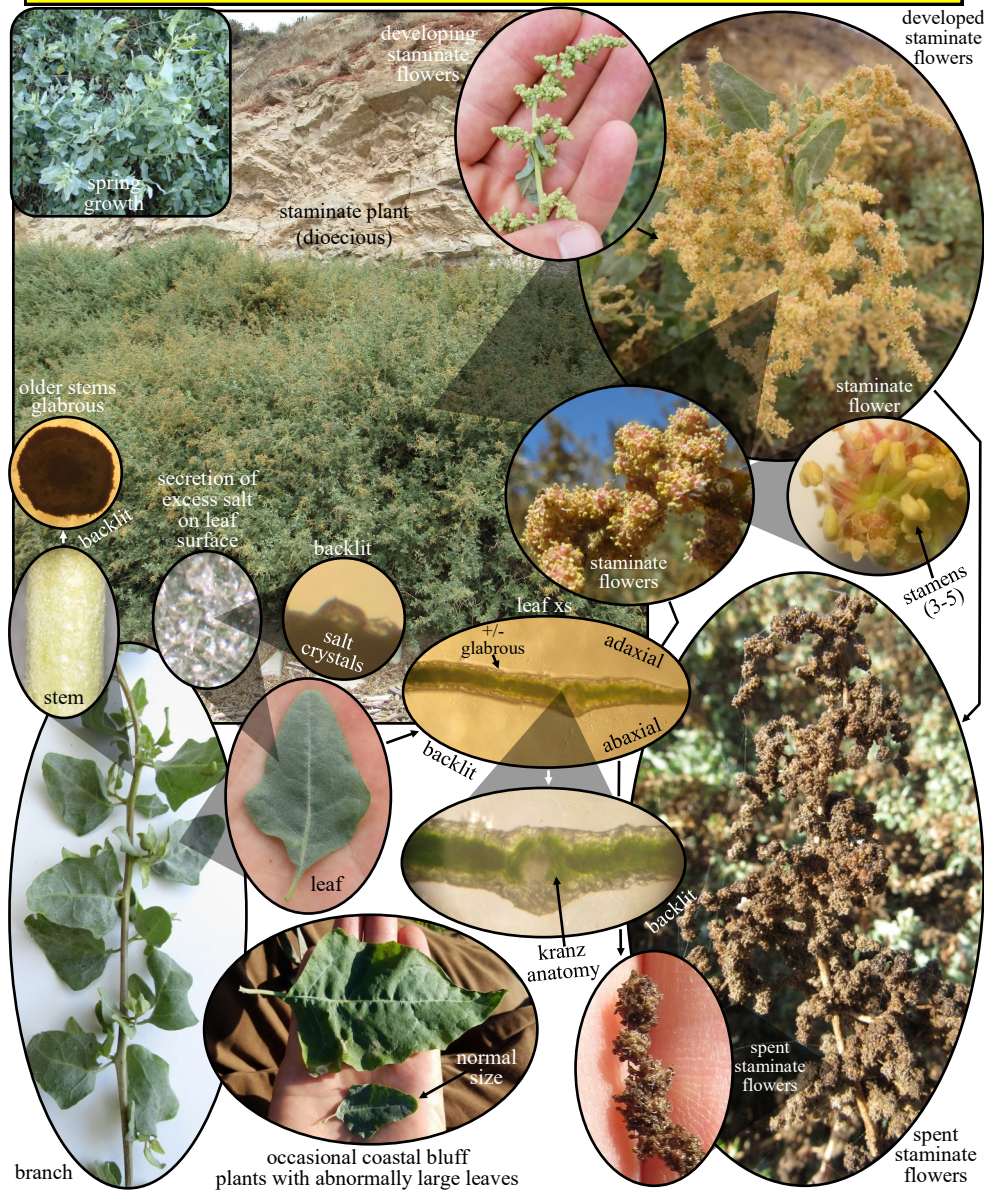
Big Saltbush (*Atriplex lentiformis*)

Order: Caryophyllales

Family: Amaranthaceae (Spinach Family)

Flowers: July - October

Atriplex lentiformis is a perennial shrub. It is found throughout the peninsula especially along the coastal bluffs. It can be dioecious or less commonly monoecious. Leaves are deltate to rhombic, ovate to oblong-elliptic. The leaves are also scurfy, grayish-green and have kranz anatomy. Stems are primarily circular in cross section (terete) and are densely-fine scaly when young and glabrous when older. Staminate



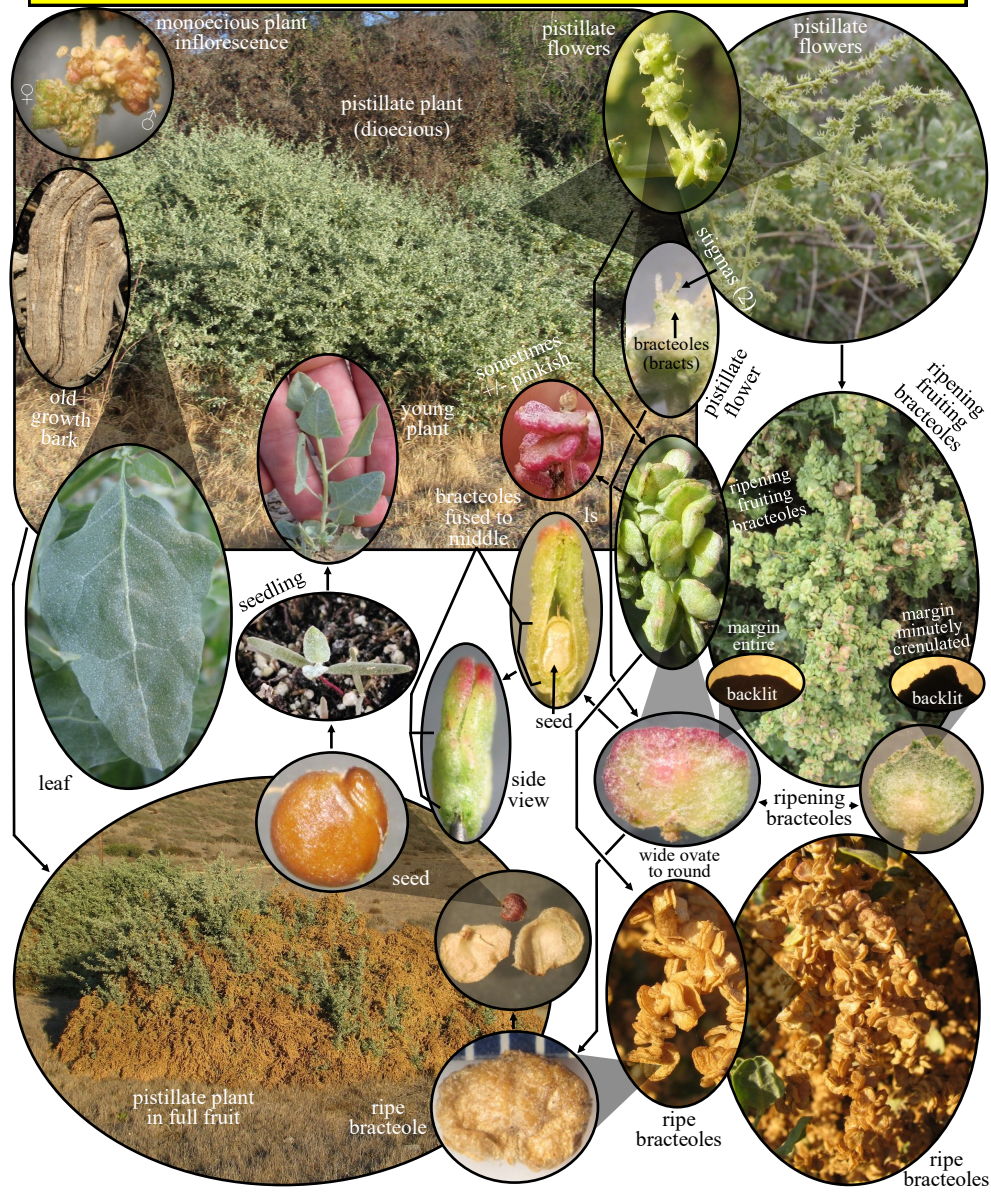
Big Saltbush (*Atriplex lentiformis*)

Order: Caryophyllales

Family: Amaranthaceae (Spinach Family)

Flowers: July - October

flowers are small with 3 to 5 stamens and are in clusters. Pistillate flowers are small with 2 stigmas and subtended by two bracteoles (bracts) and are also in clusters. The fruiting bracteoles are fused to the middle. The fruiting bracteoles are wide ovate to round, sometimes compressed, and have margins entire to minutely crenulated. The seed is brownish and somewhat spherical.



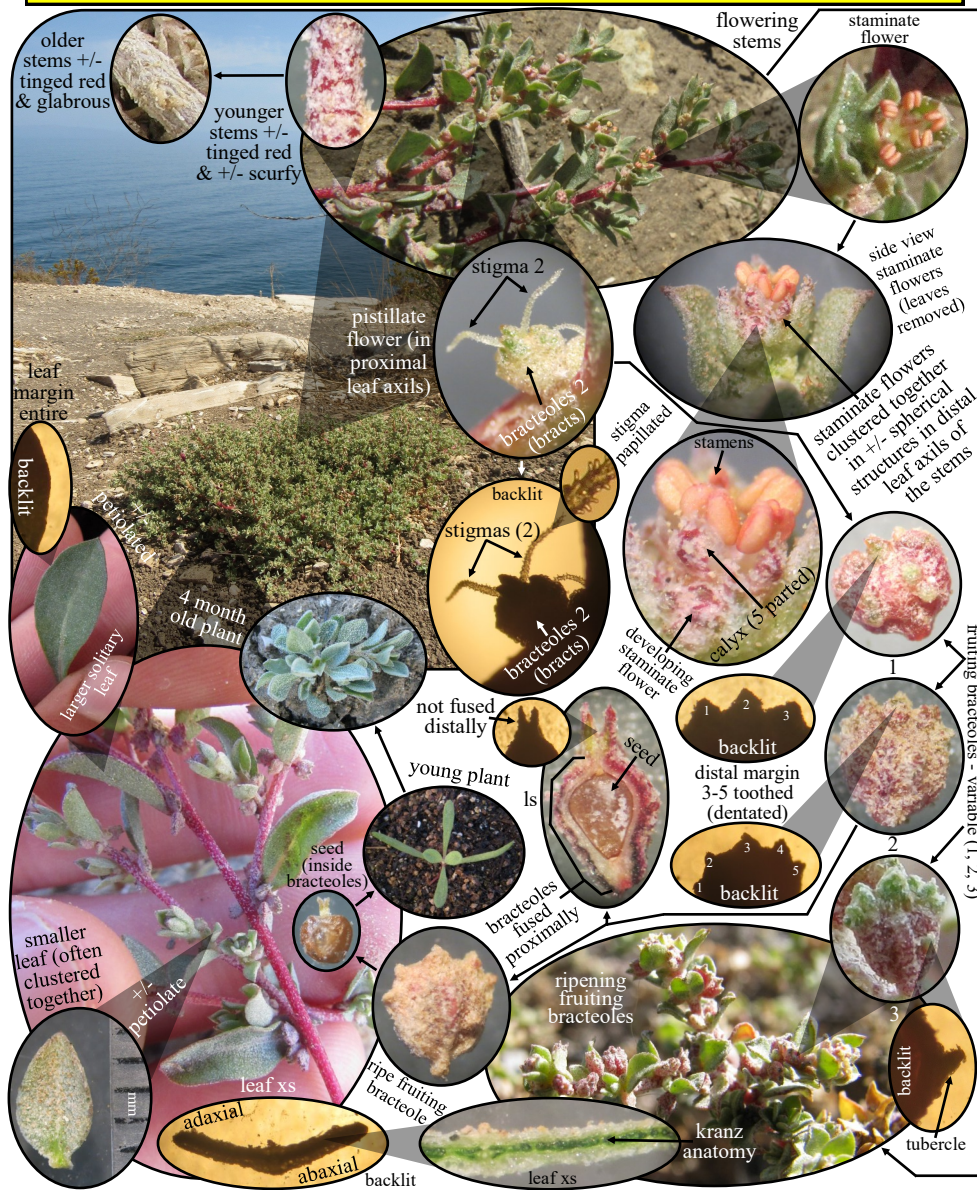
South Coast Saltscale (*Atriplex pacifica*)

Order: Caryophyllales

Family: Amaranthaceae (Spinach Family)

Flowers: March - October

Atriplex pacifica is an annual herbaceous plant. Its overall growth habit is generally mat-like. It is primarily found along the coastal bluffs on the peninsula. It is a rare plant (CNPS ranking 1B.2). Plants are monoecious. Older stems are usually brownish (occasionally tinged red) and glabrous. Younger stems are usually tinged red and are generally scurfy. Leaves (kranz anatomy present) are elliptic to oblanceolate or obov-



South Coast Saltscale (*Atriplex pacifica*)

Order: Caryophyllales

Family: Amaranthaceae (Spinach Family)

Flowers: March - October

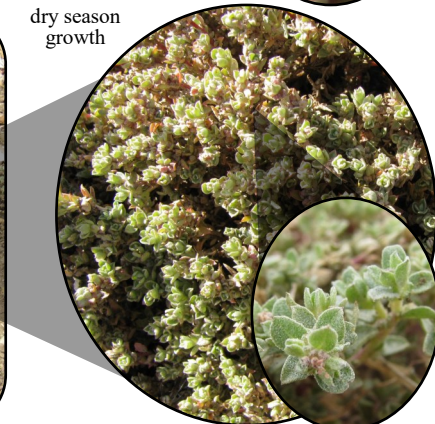
-ate and have entire margins. During the wet season, larger solitary petiolated leaves are usually more abundant along the stems. During the dry season, usually smaller sessile leaves are more abundant along the stems and are often more densely clustered together. Staminate inflorescences are in somewhat spherical clusters and usually in distal bractless leaf axils of the stems. Staminate flowers have 3 to 5 stamens and a 5 parted calyx. Pistillate inflorescences are usually in the proximal leaf axils of the stems. Pistillate flowers have 2 stigmas and are surrounded by 2 small foliaceous bracteoles (bracts). The fruiting bracteoles are fused proximally (middleside area). The fruiting bracteoles surfaces are usually smooth but can also be tuberculated. The margins of the fruiting bracteoles are minutely 3 to 5 toothed (dentated) at the apex. The seed is brownish and somewhat spherical. An odd thing about the peninsulas *A. pacifica* is that it tends to have more of a have perennial life duration rather than an annual life duration. Although annual life duration has been encountered as well, but appears to be less frequent.



wet season
growth



dry season
growth



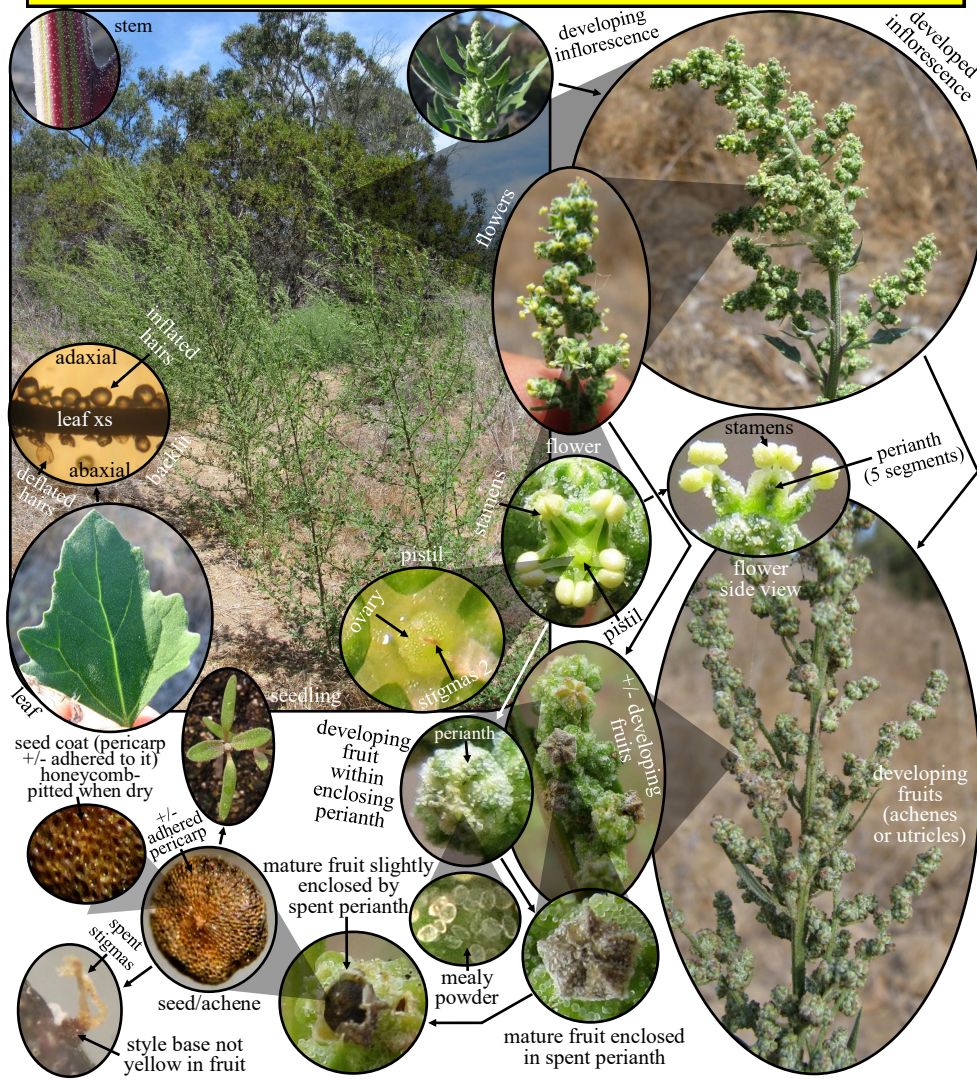
Pitseed Goosefoot (*Chenopodium berlandieri* var. *sinuatum*)

Order: Caryophyllales

Family: Amaranthaceae (Spinach Family)

Flowers: July - September

Chenopodium berlandieri var. *sinuatum* is an annual herbaceous plant. It is found in a few locations on the peninsula. The entire plant is often covered with a mealy powder (farinose) and is scentless. The leaves are somewhat diamond-shaped and usually have 2 lobes near the base. Leaf margins can be serrated to irregularly toothed or entire. The leaves are usually covered in inflated hairs and have a mealy powdery feeling to them. Flowers are bisexual with 5 stamens, 2 stigmas (style base is not yellow when in fruit) and 5 perianth segments. The fruit is an utricle that is generally enclosed by the persistent perianth segments. The seed when fully matured and dried, has a seed coat that can be brown to black and is honeycomb pitted.



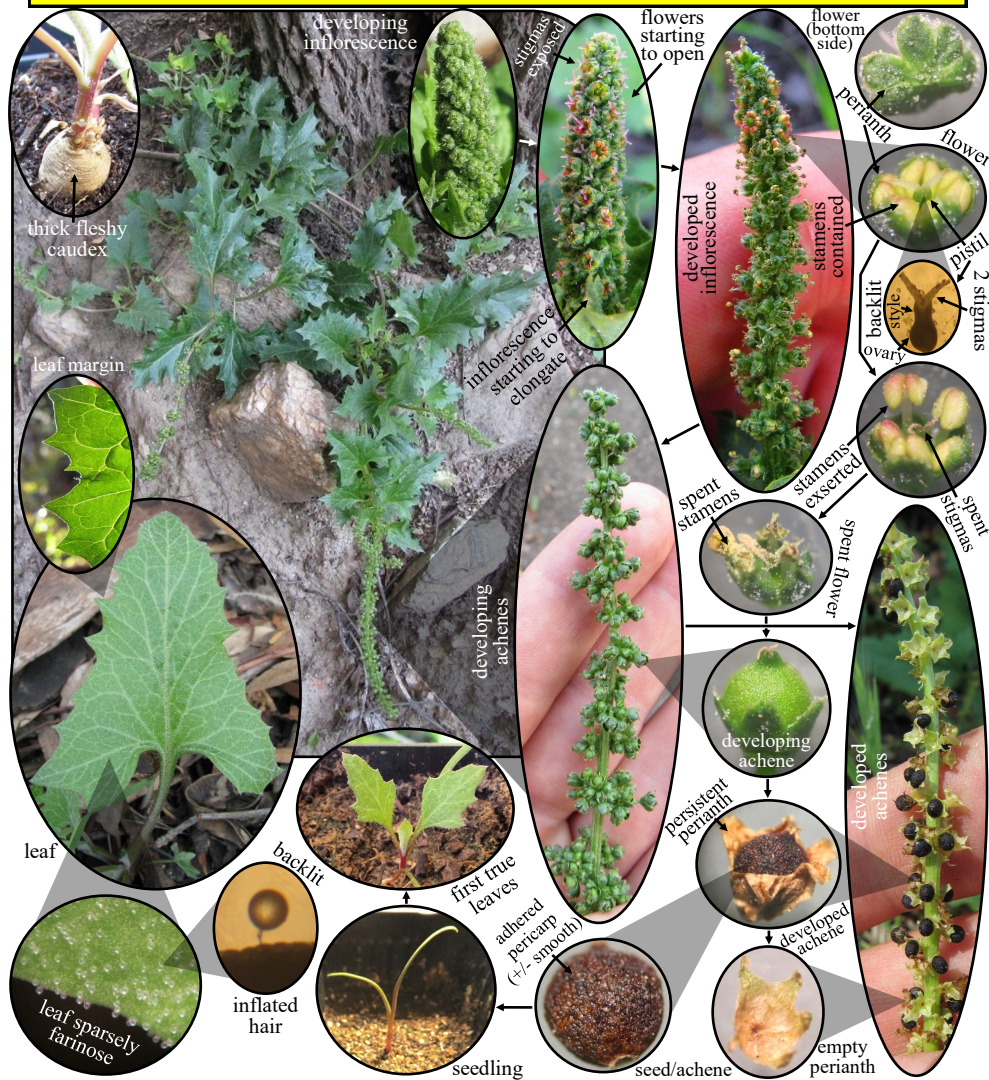
California Goosefoot (*Blitum californicum*)

Order: Caryophyllales

Family: Amaranthaceae (Spinach Family)

Flowers: March - September

Blitum californicum is a perennial herbaceous plant. It returns each year from a stout taproot. This plant is found throughout the peninsula. The petioles of the leaves are long and the overall leaf shape is generally arrowhead-shaped. The leaves are also minimally farinose and the leaf margin is sinuate-dentate. The flowers are borne on a long inflorescence and are bisexual. The perianth segments are green and connate fused. The perianth is also persistent but does not entirely cover the fruit at maturity. Flowers have 4 to 5 stamens with 2 stigmas. The fruit is an achene that has a pericarp that is adherent to the seed and is generally smooth. The seed is obovoid or roundish with a seed coat that is black and rugose.



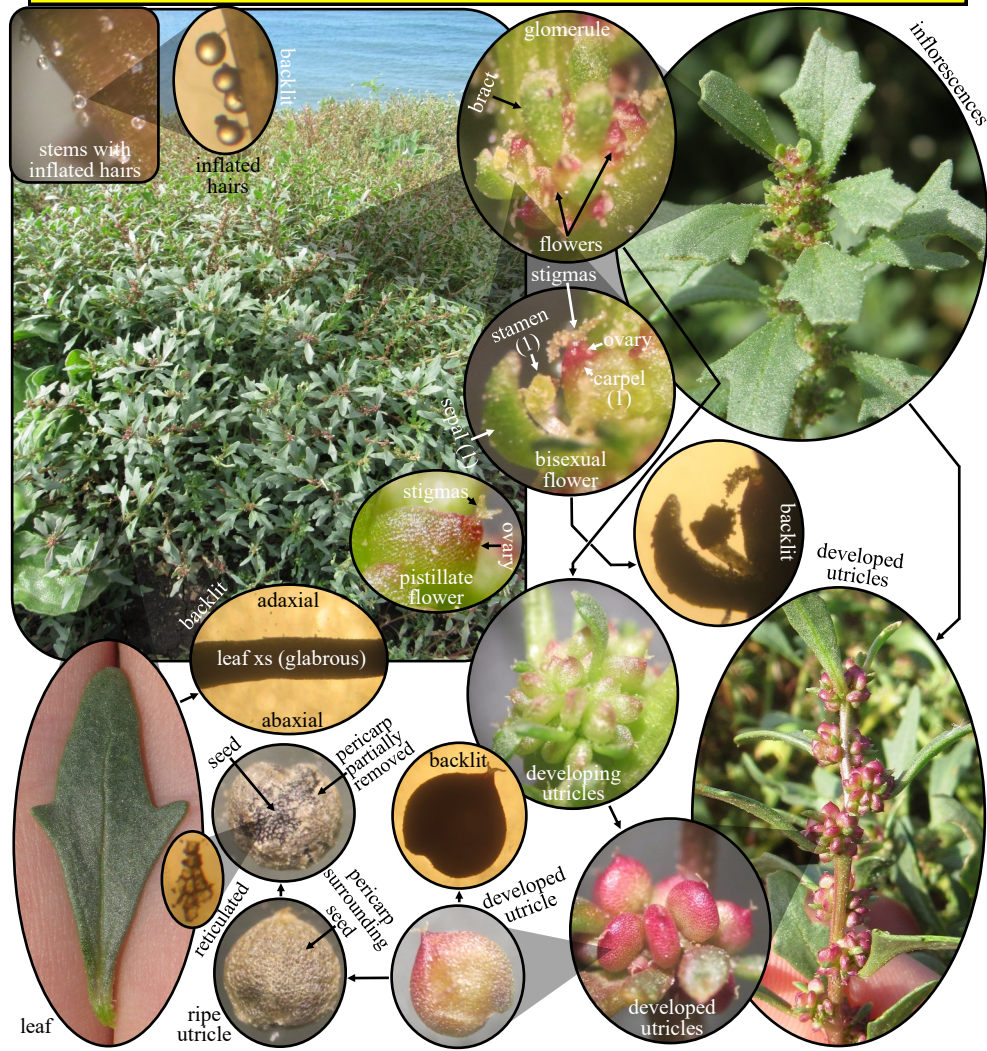
Nuttall's Povertyweed (*Blitum nuttallianum*)

Order: Caryophyllales

Family: Amaranthaceae (Spinach Family)

Flowers: April - September

Blitum nuttallianum is an annual herbaceous plant. It is found along the coastal bluffs of the peninsula. It likes to grow in disturbed soils. The stems are prostrate to ascending. The leaves are petioled and the blade of the leaf can be hastately lobed near the base, generally triangular, lanceolate or linear. The margins of the leaves are generally entire but can occasionally have a few teeth distally. Stems and leaves can be glabrous or have inflated hairs. The inflorescence is made up of a cluster (glomerule) of 5 to many flowers in the leaf axils. The flowers can be bisexual or pistillate and only have 1 sepal. There is only 1 stamen per bisexual flower. The fruit is utricle. The pericarp is whitish, membranous, reticulated, and generally separates from the seed. The seed is laterally flattened and a blackish brown color.



Woolly Sea Pear (*Suaeda taxifolia*)

Order: Caryophyllales

Family: Amaranthaceae (Spinach Family)

Flowers: nearly all year

Suaeda taxifolia is a perennial subshrub to shrub. It is found along the coastal bluffs of the peninsula and is a rare plant (CNPS ranking 4.2). The leaves are usually blue-green, lanceolate to narrowly ovate, and somewhat cylindrical. The leaves are usually hairy but can sometimes be glabrous. Flowers are bisexual or sometimes pistillate. Bisexual flowers have 5 stamens, 3 to 4 stigmas, and 5 perianth segments. The ovary is pear-shaped. Fruits are utricles that are enclosed by persistent perianth segments that are succulent. The blackish somewhat spherical seed has a membranous pericarp.

