

How to Identify Weeds vs. Baby Native Plants in a Southern California Native Garden

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Etsy seed shop: [SoCalNativeGarden](https://www.etsy.com/shop/SoCalNativeGarden)

Updated: Jan 31, 2024

Link to share this document:

https://docs.google.com/document/d/1kd8DfLjTDbJLitq1jpZ_U5mxKnwB4KFQtoa-LXSnF2c/edit?usp=sharing

If you sow seeds, grow wildflowers that reseed themselves, or just want to keep invasive plants out of your garden, you'll need to ID the native plants when they are small and pull the other plants that aren't wanted. It's easiest to do this early in the growing season when the ground is moist and the weeds are small. Areas that get more weeds are: unmulched and sunny areas, disturbed areas, and edges of the garden. Also, places where people and animals walk get more weeds as the seeds hitch a ride on shoes, clothing and fur. I get lots of weeds where the neighborhood cats roam.¹

Baby Native Plants

First, identify the **natives** you want in the garden and learn what they look like when young.

		
<u>Baileya multiradiata</u> <u>Desert marigold</u>	<u>Encelia californica</u> , <u>Bush Sunflower</u> Sometimes called brittlebush. Smell crushed leaves to ID.	<u>California Poppy</u> , <u>Eschscholzia californica</u>

¹ Be sure to wash your hands thoroughly after gardening so you don't expose yourself to toxoplasmosis which is present in soil where cats defecate. Please keep your cat indoors. Outdoor [cats kill billions of native birds](#) each year.

More natives:

	I don't yet have a hummingbird sage baby plant pic. Leaves: soft and hairy. Underside: white and wooly.	
<u>White Sage, <i>Salvia apiana</i></u> Rub and smell finger, pungent, sharp sage smell.	<u>Hummingbird sage, <i>Salvia spathacea</i></u> Rub leaf and smell your finger. Sweet, aromatic sage	<u>California Buckwheat, <i>Eriogonum fasciculatum</i></u>



Desertbells, *Phacelia campanularia*, aka California bluebells. Notice in the picture on the right, the two different sets of leaves. The plain, round leaves emerge first and are called Cotyledons. The adult leaves emerge later and are called true leaves. You may need to wait for the true leaves to emerge to successfully ID a plant as many cotyledons from different species look alike.

Native Lupines!



[Silver lupine](#), hairy leaves reflect sunlight.



[Lupinus succulentus](#)



Lupine, but with just the cotyledons visible.



[miniature lupine](#), *Lupinus bicolor*



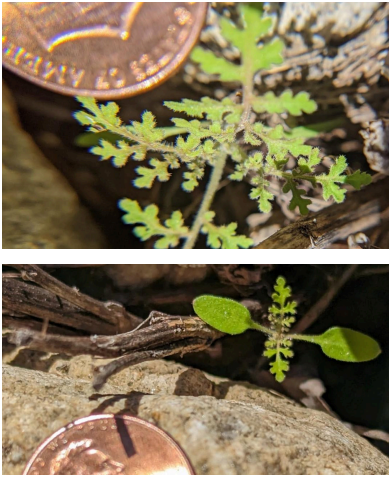
[Stinging Lupine](#), pic by [Ken Blackford](#)

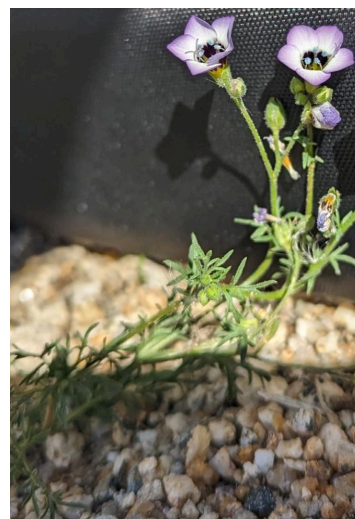


[Tap root](#) visible

Lupines with the cotyledons and first true leaves visible

More natives:

		
<u>Lacy Phacelia</u> (cotyledons visible in lower pic)	<u>California Fuchsia</u> <u>Epilobium canum</u>	<u>Elegant Clarkia. Clarkia unguiculata</u>
		 pic by <u>Tiffany Jensen</u>
<u>Yarrow. Achillea millefolium</u>. Soft, feathery leaves.	<u>Salvia columbariae</u>, Golden Chia, Chia sage, rub and smell.	<u>Tidy Tips. Layia platyglossa</u>, (I think.)



Native [Bird's-eyes Gilia \(Gilia tricolor\)](#)

Do not confuse [Gilia tricolor](#) with Bindi weed,, [Soliva sessilis](#)



[Palo Verde](#) tree pic by [Carl Shelton](#)

Purple Chinese Houses, *Collinsia heterophylla*



Collinsia heterophylla is a fairly unremarkable plant before it blooms. It is easily mistaken for a weed. So keep an eye out for its alternating double leaves with the crease down the middle. When in doubt, wait for it to flower.

Use your Senses but Know the Plants you Should Not Touch

As you garden, feel and smell the leaves of the garden plants you love (and know are safe). You can find that the adult plants have distinctive characteristics that are also present in the baby plants. For instance, the unique smell of adult white sage (and many other members of the *Salvia* genus and mint family when the leaves are rubbed or crushed) is present in the baby plant even though the baby leaves may look quite different. California fuchsia has a smooth waxy feel while baby yarrow can be ID'd by the soft, feathery feel of the leaves. But be aware that some plants shouldn't be touched. Phacelia and mallow species for instance are covered with tiny hairs that can cause an itchy skin rash when they contact bare skin. And of course don't touch the poison oak, sumac, and ivy or the nettles. I've gotten itchy rashes from my plants at times and I've been stung by a nettle once and once was enough. For me, the symptoms cleared up in two to three days and I learned which plants not to touch without gloves. For more info go to: [Poisonous Plants: Symptoms and First Aid from the CDC](#). And, of course, **use common sense** around plants with thorns and spines. Wear gloves when handling any plant unless you know it is safe. Gardening gloves also help prevent cuts, splinters, bites, and stings. You don't need to spend a lot on gloves. For everyday gardening and weeding I prefer the stretchy gloves with latex on the palm and fingers because they breathe well and they give me the feeling and dexterity to pull out tiny weeds including the roots. But I also have a more expensive pair of thick leather gloves for when I'm handling chipped mulch and other things with thorns, large splinters, or sharp edges. Wear thick leather or cut resistant gloves when handling your pruning tools. There's no sense in risking your fingers.

Weeds



[Fiddleneck](#) aka tarweed,
Genus *Amsinckia*:
A **native** but so weedy, I pull
it out anyway. All parts are
toxic. I recommend wearing
gloves when handling this
plant. It has brittle, irritating
hairs. Some people like them
in the garden as they are
good for butterflies.

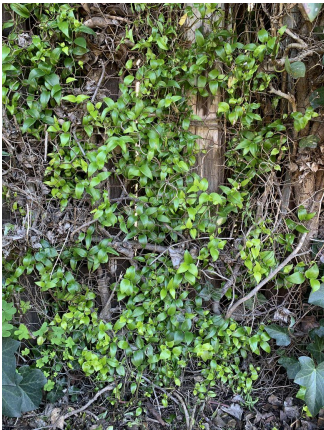


Image by [Jon Wolf](#)



Image by [Pamela Trounstone](#)

[Bridal Creeper](#)
Asparagus asparagoides

Dig down and remove the
entire tuber-like root system
intact.



Bindi weed aka burweed,
[Soliva sessilis](#), an invasive
species and noxious weed.
Pull before the tiny yellow
flowers go to seed. Be careful
not to confuse these leaves
with those of CA poppy or
[Gilia tricolor](#).

More Weeds:

	Small nettle, <i>Urtica urens</i> (non-native) An annual stinging nettle. Aka dog nettle, burning nettle, annual nettle. Or Stinging nettle, <i>Urtica dioica</i>. A native perennial. Do not touch without wearing gloves. The sting is very painful. More info	
		
<i>Euphorbia peplus</i> (petty spurge)	<i>Euphorbia peplus</i> (petty spurge)	<i>Euphorbia peplus</i> (petty spurge)
		
Cheeseweed, <i>Malva neglecta</i>	Mustard (<i>Brassica</i> genus)	Thistles. (Sharp, wear gloves)

More weeds:



[Senecio vulgaris](#), common groundsel (I think)



A type of bunch grass. IDing grasses is difficult.



Pic by [Robin Stearns](#)

One of >250 species of [Dandelion](#). Dig out tap root.



Henbit (*Lamium amplexicaule*) is a common weed throughout the world but it of low environmental concern as it provides nectar for pollinators and seeds for birds and does not seem to harm the ecosystem. I still prefer to pull it as it produces thousands of seeds and can spread rapidly throughout the garden.

More Weeds:

-[Guide to Spotted Spurge](#)

-[Invasive Iceplant](#)

-[Invasive Thistles](#) in the Southwest

-[Yellow Star Thistle](#) This invasive plant is toxic to horses.

-[Bridal Creeper](#), dig down and remove the entire tuber-like root system.

-[Guide to clover management](#)

-[The weed Oxalis is often mistaken for clover](#), dig down and pull it all.

-[Stork's bill/filaree](#). Pick up seeds before they [drill themselves into the ground](#).

-[Henbit Deadnettle](#) is a common weed and easy to pull, although it provides nectar for bees and food for animals so, while i still pull them, it isn't as ecologically harmful as some of the others.

If you can't ID a possible weed, you can let it flower which makes ID'ing much easier. This is risky as they will go to seed if you forget to check on them. Some weeds shouldn't be allowed to grow long enough to flower. For instance, [spotted spurge](#) and [burclover](#) should be dug out completely as soon as possible. Succulents can clone themselves asexually from just a separated piece of themselves so don't need seed to spread. Personally I only plant succulents in pots in order to control their spread. [Guide to "annoyingly invasive" succulents](#). Thistles can grow tall and their roots are much harder to pull when they are big.

Be particularly aware of any unfamiliar flowers appearing in the garden which may indicate the presence of new weeds on the verge of going to seed.

Here is a link to more [pics of baby weeds in my garden](#). There are [dandelions](#), [thistles](#), and [cheeseweed](#), an invasive member of the mallow family. Also, be on the lookout for [clover](#), non-native grasses, and [spotted spurge](#). I try to learn to ID more weed species each year. Pull them gently, firmly, and completely by grasping as low as possible on the stem so that you pull all the plant, including the roots. Sometimes I pull natives by mistake, especially when I've never seen them before. Learning from mistakes is just part of the process.



Pull weeds, including all **the roots** so they don't come back. Loosening the soil around the roots with a hand weeder tool, stick, screwdriver or trowel will allow the roots to come out intact. It is easier to do this while the soil is soft from moisture. When pulling grass, ivy, and bamboo, be on the lookout for runners/rhizomes so you can pull those as well.

Hand weeder, aka dandelion weed puller, for loosening soil around tough tap roots like dandelion and thistle.

Using Apps and other online resources to ID

I get good results taking close up pictures of small plants and then using [Google Lens](#) (Google reverse image search) on my android phone. It's much easier for apps to ID plants after they are in bloom but this is often too late to manage weeds effectively. So go to a native plant garden like the [California Botanic Garden](#) or use [Calscape.org](#) or [Calflora](#) and start learning more native plant species endemic to your area/biome/plant community so you can tell when something pops up in your garden that doesn't belong. If you need help, post a pic on the [Plant ID facebook group](#).

Weeds Love Disturbed Areas, Natives Hate Compacted Soil

There is quite likely a huge population of weed seeds lying dormant just below the soil surface in your garden. Weeds like to gain a foothold in disturbed areas so limit digging activities. When you have to dig and turn the soil over like when transplanting a new nursery purchased plant, monitor the area for the next couple months to catch any new weeds. Weed seeds can sometimes come in the soil of a new nursery plant. Don't walk on steep slopes. Every time your foot slips, it causes erosion and opens up areas for weeds. Walk on a ladder or on rocks or on large slopes, make a terraced walking path.

Many natives can't grow in compacted soil and that is where weeds can proliferate. Avoid walking on garden soil, especially when it is wet. Never drive or use heavy wheeled machinery on garden soil if it can be avoided. Add mulched foot paths or stepping stones to a garden so you have a place to step when searching for weeds. Plan your garden layout ahead of time so

weedy areas like unmulched flowerbeds are within easy reach. Leave enough room around larger perennials so you can move around to perform pruning and search for weeds.

Once the native perennials are established, they will suppress weeds by dropping their leaves to create mulch, blocking sunlight, changing the soil microbiome, and absorbing water and nutrients with their roots. When natives are dominating the garden, your weeding duties will become much lighter.

Help native insects and cut down on gardening cleanup time by [Leaving the leaves](#). Refer to [Mulch Types for Southern California Gardens](#) for more information on using mulch to suppress weeds, save water, and improve soil quality.

Herbicides, health, and the environment

Please pull by hand rather than resorting to chemical herbicides. The toxins in herbicides hurt the natural environment, [kill bees](#), [harm the human fetus and frogs](#), [pollute waterways](#) and groundwater, [kill seagrass](#), and [cause convulsions in small animals](#). However, herbicides do have a use in large scale, professionally managed habitat restoration projects. When hand weeding is impossible and herbicides become the only practical option left, always use the minimum amount necessary to complete the job and use a specific targeted herbicide for the weed you are targeting rather than a broad spectrum herbicide. Read the directions and warnings on the bottle and [wear protective gear](#). Don't spray herbicide in windy or rainy weather or it will spread around the area. I have no hands-on experience with herbicides but I have seen it misused and overused by both professional landscapers and amateurs.

If you want to start a native garden but currently have a grass turf lawn or an area overrun by invasives, there are herbicide free methods to kill the existing plants. You can [solarize](#), [sheet mulch](#), or use a [plant-based hot foam](#). Personally, I just hired someone to physically pull out the turf grass and apply a 3 to 4-inch layer of arborist chips. I then spent many hours weeding by hand over the next couple years.

Weeding can be a calming, meditative practice and it's a good reason to get up early and get outside before the sun gets too hot. Gardening and weeding may become more difficult as we age, lose flexibility, or mobility. [Stretches may be done standing or sitting down](#). Exercise each day to maintain a strong core and good balance. [Gardening as a workout](#). Wear a wide brimmed hat, sunglasses, and either sunblock or long sleeves for sun protection. Use gardening gloves and wash your hands well, including the dirt under your nails, when you are done.

Good luck and happy weeding!

More info from CNPS: [Weed Control](#)

[UC IPM](#), Statewide Integrated Pest Management Program, Definitions and Info

[Cal-IPC](#), Invasive Plant Council. [California Invasive plants A-Z](#), and Cal-IPC [Inventory](#), Please

consider [donating](#) to Cal-IPC to help stop the spread of invasive plants in California. I'm not affiliated with Cal IPC but I am a donor.

YouTube:  Become a Weed Warrior with the Master Gardeners (03/13/2021)