

Questions and Answers from the UC IPM Urban and Community Webinar “Weeds, Wildlands and Wildfires” on November 5, 2025

During the webinar, Dr. Chris McDonald answered live questions from participants. Below are some of the questions asked about invasive plants and their environmental impacts in California. Keep in mind that some of the questions were related to content shared during the live presentation. This list does not include all questions that were answered live.

Q: Can you suggest any resources with lists of invasive plants by region with photos to help the public with identification?

A: If you have a smart phone, the app Seek, by iNaturalist, is a great way to learn more about the plants in your location. The algorithm it uses to identify plants is pretty good and gets most plant species correct, or it might get close by identifying the correct type of plant but not the correct species. Identifying plants on Seek is much more accurate than identifying wildlife on the app. Next, the [California Invasive Plant Council](#) has several resources on its website to help learn more about invasive plants in California. Last, the website and app [CalFlora](#) is helpful in mapping plants that have already been identified. Unfortunately, there is not a comprehensive weed identification guide by region in California. There are so many weedy and invasive plants spread across California, with different species in urban and suburban areas compared to natural areas, it would be a huge undertaking. There is a book called *The Weeds of California and Other Western States* that is 1600 pages divided into two volumes. California has a lot of weeds!

Q: Do invasive plants change their behavior when introduced to a new environment?

A: Yes, some invasive plants will adapt to the new introduced environment and have characteristics that are different from the same invasive species found in the home range. They might adapt to the new climate pattern, a new fire or disturbance regime, or change their phenology (life cycle) to better match the invaded environment.

Q: How problematic are invasive plants in the urban or built environment?

A: Invasive plants and weeds are one of the reasons why landscapes are maintained several times a month, the other reason being that lawns and ornamental plants lose their aesthetic appeal if they grow too long. Many invasive plants thrive in disturbed soils, and many urban and suburban soils are disturbed, such as edges of parking lots, and roadsides, or grow in the cracks in driveways and sidewalks.

Gardeners will spend a significant amount of time weeding their garden because there are many species that outcompete garden plants.

Q: How do we balance using mulch for weed control vs. mulch as a wildfire risk?

A: While mulch is flammable, weeds, especially annual grasses, are much more flammable, so adding mulch to reduce weed populations will reduce the risk of a fire. On top of that, using mulch that has larger diameter chips (the opposite of gorilla hair mulch) will help to reduce fire risk even more. Using mulch is a risk reduction strategy, it will not eliminate fire on a person's landscape, it will reduce the likelihood it will burn, since mulch is less flammable. And keep mulch away from structures (zone zero). Following [CalFire's defensible space guidelines](#) is a great place to start.

Q: From an ecology standpoint, how do invasive plants change the hydrology in wildlands?

A: Many invasive plants in Southern California are annual grasses, which have fine and shallow roots. This allows less water to infiltrate the soil and the water that does infiltrate is absorbed at the top layers of the soil, so less water percolates into deeper soil layers.

Q: How do you keep invasive grasses out of a restored area?

A: When restoration is done well, there is usually 2-4 years of pre-treatment work to remove all the grasses and other weeds each and every year and reduce the population. After that, the native plants are established on site, while the fewer remaining weeds are spot sprayed, cut with a string trimmer or hoed out. If all goes well, the natives will establish where the weeds once thrived, and the natives will come to dominate the site. After that hopefully only light maintenance is needed each year to keep the weed populations at a low abundance while the native population keeps increasing.

Q: Is hairy vetch considered invasive?

A: Hairy vetch (*Vicia villosa*) is a non-native plant that can harm native plants and wildlife, at least in Southern California where I am familiar with it, so I would consider it invasive. However, hairy vetch is not on many or any invasive species lists I am aware of, and it's not a very widespread problem in Southern California, so it could be one of those lower ranked invasives that cause problems but are less problematic than something like tamarisk or non-native annual mustards.