Site Preparation

Proper site preparation will set you up for success!

Now that you know you'll be receiving a Xerces habitat kit(s) this fall, what should you be doing to get your project area ready for planting? Site preparation, particularly weed eradication, is a critical component of project success. Adequate site preparation prior to planting reduces follow-up maintenance dramatically, and greatly increases the likelihood that desirable plants will be able to out-compete weeds. If you haven't started preparing your site yet, it's not too late. Please note that we do NOT recommend tillage as a site-preparation method, as it tends to bring additional weed seeds to the soil surface and exacerbate weed problems. We hope some of our site preparation tips below will help your projects flourish:

Sheet mulching: This method can be a very effective way to reduce weed competition and improve soil quality. This organic, no-till method can kill weeds and prevent seed bank germination and adds nutrients to the soil through the use of compost and / or green manure. Weed growth is suppressed through smothering and cutting off light, while the soil is enriched by creating layers of carbon- and nitrogen-rich mulch that break down over time. More information on this method, including step by step instructions, can be found here.

Solarization: This method is recommended when there are persistent or aggressive weeds on-site, or when weed pressure is generally high. Solarization is done in the summer months and works best in hot, sunny climates. It is a non-herbicidal method of controlling weeds by placing a clear plastic sheet on moist, bare soil during periods of high temperatures. The clear plastic allows for the transfer of the sun's radiant energy to the soil, where it becomes trapped under the plastic and heats the upper levels of the soil. Solarization during the hot summer months can increase soil temperatures to levels that

not only kill existing vegetation but also impact the viability of weed seeds in the top few inches of soil. More information on this method, including step by step instructions, can be found here.

Herbicides: Herbicides can be used for project site-preparation, with some caveats. Keep in mind that some weeds have developed resistance to certain herbicides, some herbicides can be persistent and leave residuals that can limit plant growth for months or even years, and some herbicides can be toxic to pollinators and other wildlife. Be sure to do some research before applying herbicides, and always follow the label instructions. Do not apply herbicides to plants/weeds while they are in bloom. More information on persistent herbicides can be found here, while information on herbicide toxicity can be found here.

Other: Other site preparation / weed eradication methods include grazing, mowing and burning. These methods tend to work best when weed pressure is low, or when you have multiple years to work on site preparation and weed eradication. These methods are best employed in the late winter through early summer, when weeds are actively growing.

Irrigation Installation: We strongly recommend installing drip irrigation for your project. Overhead watering is not recommended as it tends to vastly increase weed pressure. Take some time to install and test your drip system over the summer so that it is ready to go in the fall when you receive your plants.

Learn more about Xerces California Monarch and Pollinator Habitat Kits

Questions? **Contact us at centralvalleypollinators@xerces.org**

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