

Planting for Change  
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The impacts of climate change are being felt across the globe. According to NASA, the Earth's average surface temperature has increased about 1.5 degrees F over the past hundred years and the trend is expected to continue. This, scientists say, has caused glaciers to melt and sea levels to rise. Weather patterns have become increasingly unpredictable.

Gardeners and backyard wildlife enthusiasts have seen these shifts firsthand. Higher average temperatures and shifting rain patterns are causing plants to bloom earlier and longer, sometimes skipping dormancy. Chill hours may be reduced, which is particularly important to fruit and nut growers. Invasive, non-native plants and animals' ranges are expanding, often to the detriment of our native species. Important connections between pollinators, breeding birds, insects and other wildlife and the plants they depend on have gotten out of sync. Pollinators, such as hummingbirds and bees may arrive either too early or too late to feed on the flowers on which they normally rely. With that, pollination rates are likely to decline. Pests and pathogen attacks are expected to be more unpredictable and have greater impact.

These new realities create challenges for us all. Gardeners are on the frontlines and can lead the charge to adapt to the changes that are already underway. We can start by being mindful observers—noticing the changes occurring in our own backyards and responding accordingly. Maybe that means trading “tried and true” practices for more effective ones. Planting times, plant locations and plant varieties may need to be adjusted to allow our gardens to thrive and to maintain healthy ecosystems.

Sustainable garden practices can positively change the environment. What we do in our gardens matters. By protecting our water, soil, air and wildlife, we become part of the solution.

Here are a few of the things we can do.

Plant natives. Remove invasive species from your garden and plant natives appropriate for your garden's conditions. Natives and adapted species tend to require less water and chemicals to thrive. California Native Plant Society has a plethora of resources on their website [www.CNPS.org](http://www.CNPS.org).

Seek out “wildlife magnets” wherever possible. Restore the balance of nature by encouraging populations of the “good” bugs, many of which feed on the “bad” bugs. According to the Wildlife Federation ([www.nwf.org](http://www.nwf.org)), oaks, willows and aspens attract more than 200 butterfly and moth species that use them as host plants for their caterpillars. These trees, in turn, attract numerous birds that eat those caterpillars. By planting a mix of trees, shrubs and perennials you're creating a biodiverse landscape that will ensure a healthy wildlife community.

Reduce water consumption. Only put water where it is needed and only in the amounts plants need to stay healthy. Create hydrozones, placing plants with the same sun and water needs together. Mulch to conserve moisture and suppress weeds. Decrease your use of turf and other

water-thirsty and resource demanding plants. Plant shade trees and windbreaks to reduce weather effects.

Send less to the landfill. Compost kitchen and garden waste to decrease what you send to the landfill. (Rotting trash in landfills is the third leading cause of human-created methane emissions in the U.S.). Recycle/reuse wherever possible, including things like broken concrete, pavers, and fencing.

Nurture the soil. Add compost/organic matter or let plant litter nourish the soil. This creates a nutrient-rich soil amendment that reduces the need for synthetic fertilizers. It also improves drainage, which supports healthy plant growth and reduces runoff. Consider planting cover crops, like grasses, cereal grains or legumes, to add nutrients to the soil as well as prevent erosion and weed growth.

Consider Water/Air Quality. Reduce the use of gasoline-powered yard tools like lawn mowers and leaf blowers that pollute the air. Use fertilizers and chemicals judiciously, as they can drain into our waterways. Use local merchants and professionals to save fuel consumed and reduce emissions.

Practice integrated pest management by using the least harmful approach to managing plant pests and disease. These methods result in more reliable and effective pest control without damaging beneficial insects or leading to chemical resistance. For more on Integrated Pest Management go to: [www.ipm.ucdavis.edu](http://www.ipm.ucdavis.edu).

These ideas, along with a broad host of other sustainable gardening practices, can lead to healthier gardens and ecosystems, helping all of us to meet the challenges of these unpredictable times. Master Gardeners will be offering a free class on May 18; Planting for Change. This class will be held from 9 a.m. – noon at 12200-B Airport Rd. in Jackson CA.

For more information about our public education classes and activities, go to our UCCE Master Gardeners of Amador County website at <http://ucanr.edu/mgamador>. UCCE Master Gardeners of Amador County are available to answer home gardening questions Tuesday through Thursday, 10:00 a.m. to noon, by calling (209) 223-6838. Walk-ins are welcome at our office, located at 12200-B Airport Rd. in Jackson. You can also find us on Facebook.