

Sustainable Gardening Tips for Residents



Working together for the greener good.

Sustainable Gardening Practices

- Start with Healthy Soil
- Compost and Mulch
- Sheet Mulching - Losing Your Lawn and Weeds without Chemicals
- Fertilizing Responsibly
- Water Wisely
- Right Plant for the Right Place
- Steps to Sustainable Garden Renovation



Wood chip mulch suppresses weeds and helps the soil retain moisture.



Seaside Daisy thrives well in a sunny Mediterranean climate.

Start with Healthy Soil

- Healthy soil provides a thriving environment for microorganisms and a foundation for healthy plant growth.
- Understanding the texture and structure of your soil can help nurture the soil for healthy plant growth.
- Soil texture can be categorized as sand, clay, loam, or a combination, each with unique nutrient, drainage, and water holding characteristics.
- Soil structure refers to how particles of soil are bound together into aggregates. Good soil structure can help soils with problematic texture (e.g. sand or clay).



Healthy vegetable garden bed.

Photo Credit: Joe Lamp'L of Growing a Greener World.

Start with Healthy Soil

- Problem factors include: erosion, compaction, and poor drainage.
- Various landscape practices can damage the soil:
 - Exposing the soil (e.g., construction, development)
 - Addition of excessive synthetic fertilizers
 - Spraying broad-spectrum pesticides
 - Cultivating wet soil

- For solutions to rebuild damaged soil, consult the online factsheet listed below.



*Soil compaction due to heavy foot traffic.
Photo Credit: Utah Department of Agriculture.*

For additional information, view or download the [Start with Healthy Soil](#) fact sheet.

Compost

- Compost is decomposed organic matter that can be mixed into the soil to improve soil conditions.
- It provides beneficial nutrients to plants as soil microorganisms continue to break down the organic matter.
- It improves soil structure, moisture retention, and drainage.
- Good finished compost is dark, has a rich earthy smell, and does not resemble the material from which it was made.



A compost pile.

For additional information, view or download the [Compost for Healthy Soil and Plants](#) fact sheet.

Mulch

- Mulch is any material spread over the surface of the soil that conserves moisture and prevents weeds.
- Mulch provides many benefits:
 - Retains Moisture
 - Prevents compaction
 - Inhibits weeds
 - Feeds the soil food web
- Many mulch options are available, including decorative and naturally dyed varieties of wood chip mulch.



Wood chip mulch covers a tree drip line.



Fir Bark chip mulch covers the Nectar Garden at Guadalupe River Park and Gardens, San José.

For additional information, view or download the [**Mulch for Healthier Soil and Plants**](#) fact sheet.



Piled up Bermuda grass during a Sheet Mulching Workshop.



City of San José municipal staff sheet mulching a plot in the Guadalupe River Park and Gardens, Courtyard Gardens.

Sheet Mulching – Losing Your Weeds and Lawn without Chemicals

1. Prepare the site and cut back weeds.
2. Cover the site with a biodegradable weed barrier (e.g., newspaper or cardboard). Avoid plastic whenever possible.
3. Spread Compost (compost is necessary for planting, but it can be incorporated later).
4. Spread Mulch (apply at least 4" – 6" of mulch to the entire site for weed prevention).

Mulch and Compost in Garden Beds

Mulch

- Make sure the mulch is free of weeds and disease before application.
- Apply straw or manure compost for annual plants since it breaks down quickly, feeding the soil and plants.



Compost

- When planting, mix compost into the native soil in the planting hole to provide nutrients to the root ball.
- Compost improves soil drainage, aeration, and nutrient and moisture retention.



Use Fertilizers Responsibly

- Only add fertilizers to reintroduce nutrients into the soil when necessary, not as a routine.
- Leave grass clippings and leaf litter on the lawn or soil to decompose into soil nutrients.
- Synthetic fertilizers can leach from the soil into waterways, increase soil salinity, and weaken plants' resistance to diseases.
- If needed, use an organic or slow-release fertilizer.



Leaf litter can decompose into nutrients while protecting the soil from compaction.

Use Fertilizers Responsibly



- Use a home or professional soil test to understand your soil composition and identify nutrient deficiencies.
- Choose organic fertilizers, which are formulated to feed soil organisms, improve soil structure, feed plants slowly, and prevent nutrient runoff.
- Look at fertilizer labels for organic fertilizer selection (i.e., low N-P-K values and low percentage of soluble nitrogen).

For additional information, view or download the [Fertilize Responsibly](#) fact sheet.

Water Wisely

- Proper watering can protect your plants from fungal diseases and pest infestations.
- Watering in the evening can bring snails and slugs to your planting areas. Early morning watering is best.
- Proper watering conserves water and saves time and money.
- Water according to plant needs and microclimates in your yard (e.g., windy, sunny, shady, sloped).



*Snail damage to crop leaves.
Photo Credit : UC IPM Statewide Project.*

Water Wisely

- Practice **hydrozoning**, placing plants with similar water needs together to promote healthier plants and conserve water.
- Drip or high efficiency irrigation with separate timer stations for each hydrozone promotes optimum irrigation efficiency.
- Adjust your watering schedule to allow water to soak into the soil and not run off the surface.
- Look for opportunities to capture rainwater or sink it into the ground. Watch this movie to understand why:
<http://www.swrcb.ca.gov/stormfilm/>



Low water-use plants in the Nectar Garden, Nature's Inspiration Gardens, Guadalupe River Park, San José, CA.

For additional information, view or download the [Water Wisely](#) fact sheet.

Right Plant for the Right Place



California native plants in the Café Garden, Guadalupe River Park and Gardens in San José, CA.

- A diverse planting palette limits the spread of diseases while attracting local beneficial insects (e.g., pollinators) and wildlife.
- Place plants in the microclimates to which they are suited.
- Give plants enough space to grow to their mature size
- Placing plants in a poor location can result in disease, higher maintenance, and the need for pesticides and fertilizers.

Right Plant for the Right Place

- Your garden may have microclimates similar to natural habitats and plant communities in the Santa Clara Valley.
- Selecting plant species native to these communities can improve and enhance the health and quality of your garden.
- Local native plants are already adapted to local conditions, making them better competitors against pests and diseases.



Chaparral: California Fuchsia



Grassland: Idaho Fescue



Riparian: Blue elderberry



*Conifer Forest:
Elegant Coral Bells*

For additional information, view or download the [Right Plant for the Right Place](#) fact sheet.

Steps to Sustainable Garden Renovation

- Ask yourself some questions:
 - How do I want to use my yard?
 - Are there unused or unnecessary turf areas?
 - What are the soil, sun, water, and wind conditions of my yard?
- Make a detailed plan for your garden and landscape (e.g., removing lawn areas, selecting plants, installing a drip irrigation system).



Café Garden in the Nature's Inspiration Gardens in San José, CA.

Steps to Sustainable Garden Renovation



Bark mulch in the Nectar Garden, Nature's Inspiration Gardens at Guadalupe River Park and Gardens.

- Consult your local native plant nursery or landscape professional for help.
- Create a healthy soil environment before planting.
- Group plants by water needs to reduce water use.
- Check out local rebates from the Santa Clara Valley Water District or other water conservation agencies.

For additional information, view or download the [Steps to Sustainable Garden Renovation](#) fact sheet.

Additional Resources

Click on the following links to our technical fact sheets:

- **Start with Healthy Soil**
- **Compost for Healthy Soil and Plants**
- **Mulch for Healthier Soil and Plants**
- **Fertilize Responsibly**
- **Right Plant for the Right Place**
- **Steps to Sustainable Garden Renovation**

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