

Sustainable Practices

Sustainable communities use land efficiently and foster well-planned growth, not scattered development (sprawl). They reserve highly productive soils, prime farmlands, for crop production and preserve sensitive habitats, especially waterways. Sustainable communities maintain farmland on the urban fringe for food security and to minimize the distance food travels.

What is “sustainable” agriculture? It’s producing food or fiber without depleting or damaging natural resources. It’s managing farming systems to conserve water, control pests in non-toxic ways, foster pollination, use on-farm wastes to build soil fertility, and more.

See demonstrations of sustainable farming methods in the Ag Area of the LandUse Learning Center. Learn about:

- **Cover crops and compost** that control erosion and weeds, plus build soil fertility and health.
- **Mulch and plant residues** for capturing moisture, reducing evaporative water loss from the soil surface, and to shade out weeds.
- **Irrigation water management** that uses controllers (timers) that run the watering system to apply the correct amount of water for the current weather conditions. See a weather station that collects data about rain, temperature, incoming solar radiation, evapotranspiration, and more.
- Efficient, low-volume **irrigation systems** that apply water in measured amounts to saturate the rooting area of the plant.
- **Integrated pest management** that utilizes a variety of techniques to minimize risk to human and environmental health, such as planting pest-resistant varieties of crops, spraying least-toxic pest control materials, releasing natural enemies of pests (biological control), and using crop rotation to inhibit pests. **Biological control** utilizes predatory insects, parasitoids, bats and birds. A variety of **bird and bat boxes** shelter the creatures that help control pests.
- A **windbreak** that controls wind erosion, protects crops from strong winds, and provides wildlife habitat.

Support Sustainable Agriculture. You can help by using your purchasing power. Buy locally produced products, and when possible, buy directly from local, sustainable growers at farm stands, farmers’ markets, U-pick fields, and CSA’s (Community Supported Agriculture).

Native Hedgerow

Below are some of the native species appropriate for our area that provide flowers and cover during the entire year and attract many beneficial insects. For more information, see *Establishing Hedgerows on Farms in California* at <http://anrcatalog.ucanr.edu/pdf/8390.pdf>

✓	SCIENTIFIC NAME	COMMON NAME	LIFE FORM	BLOOM PERIOD
	<i>Arctostaphylos pungens</i>	Pointleaf Manzanita	shrub	winter
	<i>Asclepias fascicularis</i>	Narrowleaf Milkweed	perennial	late spring-summer
	<i>Ceanothus tomentosus</i>	Woolyleaf Ceanothus	shrub	late winter
	<i>Corethrogyne filaginifolia</i>	California Aster	perennial	summer-fall
	<i>Encelia farinosa</i>	Brittlebush	shrub	spring
	<i>Epilobium canum</i>	California Fuschia	perennial	fall
	<i>Eriogonum fasciculatum</i> ssp. <i>polifolium</i>	California Buckwheat	shrub	late spring-summer
	<i>Grindelia camporum</i>	Great Valley Gumweed	perennial	late spring-summer
	<i>Lotus scoparius</i> var. <i>brevialatus</i>	Short winged Deerweed	shrub	late winter-spring
	<i>Muhlenbergia rigens</i>	Deergrass	perennial grass	summer-fall
	<i>Nassella pulchra</i>	Purple Needlegrass	perennial grass	spring
	<i>Penstemon spectabilis</i>	Showy Penstemon	perennial	spring
	<i>Phacelia ramosissima</i>	Branching Phacelia	perennial	late spring
	<i>Prunus illicifolia</i> ssp. <i>illicifolia</i>	Hollyleaf Cherry	tall shrub	spring
	<i>Rhamnus crocea</i>	Spiny Redberry	shrub	late winter
	<i>Salvia apiana</i>	White Sage	shrub	late spring
	<i>Salvia mellifera</i>	Black Sage	shrub	spring



Agricultural Area of the LandUse Learning Center

During your visit, use the lists to check off the plants that you are interested in.

The **Agricultural Area** includes demonstrations of sustainable farming practices and a variety of fruit trees that grow in the climatic conditions of inland Southern California valleys, specifically the greater Riverside-San Bernardino areas.

Not all of the deciduous* varieties listed are commercially suited as “crops” on a large scale, but the list includes those that a home gardener might plant to produce a large variety of fruit over an extended period of time.

For information about fruit trees see:

University of California (UC) Cooperative Extension
UC info re: home orchards
UC Cooperative Extension: citrus, avocados, and subtropicals
California Rare Fruit Growers



<http://ceriverside.ucanr.edu/>
<http://homeorchard.ucanr.edu/Links/#mastergardeners>

http://ceventura.ucanr.edu/Com_Ag/Subtropical/
www.crfg.org

For farming and economic information:

UC Small Farm Program
UC Davis Agricultural and Resource Economics
USDA National Agricultural Library
California Farm Bureau
Access to Capital

<http://sfp.ucdavis.edu/>
<http://coststudies.ucdavis.edu/>
<https://www.nal.usda.gov/>
<http://www.cfbf.com/>
<https://newfarmers.usda.gov/access-land-and-capital>

Avocado Trees

For avocado trees, the flower type is of great importance to commercial growers. The inter-planting of Type A and Type B plants enhances cross-pollination. Flower types are listed below.

✓	VARIETY	HARVEST TIME	FLOWER TYPE	
	Fuerte	Jan-May	"B" Type	
	Hass	Jan-Aug	"A" Type	
	Holiday	Aug-Dec	"A" Type	AKA: XX3 Developed by University of CA
	Pinkerton	Jan-May	"A" Type	
	Reed	April-Dec	"A" Type	
	Stewart	Oct-Dec	"A" or "A-B"	

Online resources about avocados:

UC Riverside Avocado Info <http://www.ucavo.ucr.edu/>
Virtual library of avocado knowledge <http://avocadosource.com/>



Riverside-Corona Resource Conservation District 4500 Glenwood Dr., Bldg. A, Riverside, CA 92501 • (951) 683-7691 • www.rcrcd.org
No endorsement of products, services, or viewpoints is intended, nor is criticism implied of similar products, services, or viewpoints that are not mentioned.

Deciduous Trees

A variety of deciduous* fruit trees require a specific number of cold hours to induce flowering, known as "minimum chilling requirement." This is important to know when selecting fruit trees for a climatic region. Since the inland valley region has mild winters, the trees listed and demonstrated in the Ag Area have relatively low required chilling hours, which are noted below. Chill hours are measured by how many hours are recorded below 45°F. When we have very mild winters, even some of the trees demonstrated may not produce fruit.



Spice Zee NectaPlum®

✓ VARIETY	HARVEST TIME	POLLINATION REQUIREMENTS	CHILL HOURS REQUIRED < 45°F	
Anna Apple	July	Self or by Dorsett	200	
Arctic Star Nectarine	June	Self-fruitful	300	
Beauty Plum	June	Self-fruitful	250	
Bella Gold Peacotum®	July-Aug	Flavor Grenade Pluot	500	Peach x Apricot x Plum
Cot-N-Candy Aprium®	June	Self-fruitful	400	Predominantly Apricot x Plum
Dapple Dandy Pluot®	August	Santa Rosa, Flavor King	400-500	Plum x Apricot
Desert Dawn Nectarine	May	Self-fruitful	250	Semi-freestone
Dorsett Apple	June-July	Self-fruitful	100	
Early Autumn Apricot	August	Self-fruitful	500	
Eva's Pride Peach	June-July	Self-fruitful	250	Freestone
Flavor Grenade Pluot®	Aug-Oct	Dapple Dandy, Flavor King, Santa Rosa	200-300	Plum x Apricot
Flavor King Pluot®	Aug-Sept	Dapple Dandy, Santa Rosa	<400	Plum x Apricot
Fuji Apple	Oct	Self, pollinizes others	500	
Gold Kist Apricot	June	Self-fruitful	300	Freestone
Mid Pride Peach	July	Self-fruitful	250	Freestone
Minnie Royal Cherry	May	Royal Lee	200-300	Sweet Cherry
Panamint Nectarine	July-Aug	Self-fruitful	250	Freestone
Pink Lady Apple	Oct -Nov	Self-fruitful	300-400	aka Cripps Pink
Royal Lee Cherry	May	Minnie Royal	200-300	Sweet Cherry
Santa Rosa Plum	June-July	Self-fruitful	400	
Spice Zee NectaPlum®	July- Aug	Self-fruitful	200-300	Nectarine x Peach x Plum

Fruit and Nut Research and Information
California Stone Fruit Research Data Base
Dave Wilson Nursery home fruit growing

<http://fruitsandnuts.ucdavis.edu/>
<http://ucanr.edu/sites/ctfa/>
<http://www.davewilson.com>

**Deciduous* trees drop their leaves and become dormant during cold periods. They are not evergreen, like pine trees.

Citrus Trees

Agriculturalists and gardeners might consider delaying the planting of citrus until methods have been developed for controlling the Asian Citrus Psyllid (ACP). The insect carries one of the most devastating citrus diseases in the world, Huanglongbing, also known as citrus greening disease. ACP poses a huge threat to backyard trees and commercial citrus. Research is currently being conducted to find methods to control the insect and citrus greening disease.

California residents play a critical role in protecting California's citrus. If you think you've found ACP, call the California Department of Food and Agriculture's hotline at 1 (800) 491-1899 and talk to your local nursery about products that may help protect your trees. For more information, visit www.CaliforniaCitrusThreat.org



✓ VARIETY	HARVEST TIME	NOTES
Bearss Lime	Year round	aka: Persian or Tahitian Seedless
Calamondin	Dec-Sept	Kumquat hybrid
Cara Cara Navel Orange	Nov-Jan	Seedless, rosy flesh
Clementine Tangerine	Oct-Dec	
Eureka Lemon	Year round	Few seeds
Gold Nugget Mandarin	Feb-June	Seedless Developed by UC Riverside
Kishu Mini Mandarin	Dec-Jan	Seedless
Meyer Lemon	Year round	Low acid
Minneola Tangelo	Jan-March	Grapefruit x Mandarin hybrid
Moro Blood Orange	Dec-Feb	Red flesh
Nagami Kumquat	Dec-June	
Oroblanco Grapefruit	Dec-Mar	White Grapefruit x Sweet Pummelo Seedless, sweet, UC Riverside hybrids
Pixie Tangerine	Feb-April	Seedless Developed by UC Riverside
Satsuma Mandarin	Oct-Dec	
Star Ruby Grapefruit	Feb-June	Pink flesh/rind
Sweet Lime	Year round	
Tango Mandarin	Jan-March	Developed by UC Riverside
Variegated Pink Eureka Lemon	Year round	aka: Pink Lemonade
Washington Navel Orange	Nov-Jan	Seedless Most extensively grown citrus in CA by 1900

Tried and True or Something New? Selected Citrus Varieties for the Home Gardener
UC Agriculture and Natural Resources Publication 8472 <http://anrcatalog.ucdavis.edu/pdf/8472.pdf>