

Garden SMART

Create a beautiful **stress-free**
Sacramento-area landscape **year round**

Do these five
things now!

PAGE 3

Plan your
ultimate garden

PAGE 8

Grow food,
save water, too

PAGE 14





START NOW TO GARDEN SMART YEAR ROUND

COVER PHOTOS AND PHOTOS AT RIGHT BY ANNE STOKES
PHOTO BELOW COURTESY OF GARDENSOFT

Find the help you need *here*

Less stress on you; less stress on your landscape; less stress on the environment. And big water savings, too! Those are some of the benefits of a water-wise garden.

By growing plants that can thrive naturally in the Sacramento region, your landscape has a much better chance of success and looking good year round — regardless of shifts in the weather and climate. At

the same time, those plants need less extra irrigation to thrive and less routine care. That adds up to more garden satisfaction.

If you've been thinking about making your garden more water-wise, now is the time to take action — after the heat of summer but before winter rains. Fall is the best season to make landscape changes and plant for future success.

The Regional Water Authority, the umbrella organization over the greater Sacramento region's water providers, has teamed with local partners to guide you through this landscape transition and make the most of available resources.

In these pages, local experts share their ideas and advice on how we all can have beautiful landscapes meant to thrive for decades to come. It's the smart way to garden! 

INSIDE

- 3 Coping with another dry year
- 4 Location, location, location
- 5 Makeover creates home for wildlife
- 6 Keep trees growing strong
- 7 Avoid these renovation mistakes
- 8 Make the most of the water we have
- 10 Coping with change
- 11 Your landscape can help protect your home
- 12 Simple switch makes huge difference
- 13 Make your sprinkler system smarter
- 14 Grow food with less water
- 15 Tenga un hermoso jardín ahorre agua también



REBATES AND RESOURCES

Your water provider is here to help. Many offer rebates to replace a thirsty lawn with low-water plants, add a smart sprinkler timer, and upgrade sprinklers and irrigation components to high-efficiency models and drip irrigation.

Find available resources and rebates, and learn current watering guidelines, at **BeWaterSmart.info**.





COPING WITH ANOTHER DRY YEAR

What to do **right now** to save water and your landscape

California is once again in the midst of a severe drought. How do you help your garden cope now as well as during more dry years in the future?

Recommended by Sacramento-area experts, these five actions can provide immediate water savings and help your plants cope with dry times this fall — and for decades to come:

- 1. STRESS YOUR LAWN; SAVE YOUR TREES** Even a brown lawn can recover quickly, but drought-stressed trees may be lost forever. Cut back on lawn sprinkler time, then deep water trees with a soaker hose or the bucket method (see page 6).
- 2. UPGRADE YOUR SPRINKLERS** Replacing older sprinkler heads with high-efficiency rotator nozzles can improve your sprinkler system's efficiency by 30% while building a healthy lawn. This simple switch also cuts down on runoff.

3. INSTALL A WEATHER-BASED SMART SPRINKLER TIMER Like a thermostat for your sprinkler system, this handy device automatically adjusts how much water your landscape receives according to weather, soil, sun conditions and plant type.

4. WATER EARLY IN MORNING Scheduling irrigation before 8 a.m. can reduce evaporation by as much as 50 gallons each time you water.

5. FIX LEAKS Leaky sprinklers or breaks in irrigation lines can add up to hundreds of wasted gallons. Inside the home, a toilet leak can waste 200 gallons a day.

Water providers are here to help! Get a free water-wise house call. Details at BeWaterSmart.info.



PHOTO BY VICKI ANDERSON, COURTESY OF GARDENSOFT



SAVE YOUR PLANTS!

These tips can make a difference whether your garden favorites survive:

MULCH, MULCH, MULCH!

Three inches of organic mulch – leaves, straw, wood chips, etc. – acts like an insulating blanket, keeping moisture in soil and roots cool.

CHECK YOUR SOIL.

Before watering, use a moisture meter or insert a long-handled screwdriver into the ground. If the screwdriver penetrates more than three inches, wait to water.

ADD COMPOST.

Dig it into your soil. Compost acts like a sponge, retaining moisture while also nourishing plants.

PRIORITIZE YOUR LANDSCAPE.

Ration water to valuable trees and shrubs that take years to grow. Then, move on to the moderate- and low-value plants.

WATCH FOR SIGNS OF HEAT AND WATER STRESS.

Browned leaf edges or morning wilt are signs that plant needs immediate water.

Get more tips at BeWaterSmart.info.



LOCATION, LOCATION, LOCATION

Key to garden success? **Start by knowing** what plants prefer

By DEBBIE ARRINGTON

Marlene Simon, a.k.a. The Plant Lady, knows her plants. As staff horticulturist at the UC Davis Botanical Conservatory, she grows more than 3,000 of the world's most exotic species.

The key to keeping plants happy and garden success? Putting the right plant in the right place. By choosing a plant that's well suited for a location, it's much more likely to thrive without much additional "gardener input" such as water, fertilizer or pest control. That method works for exotic orchids — and for California natives, too. Why? The Plant Lady explains.

How do you explain the concept of "right plant, right place"?

How I like to explain "right plant, right place" is by taking into account the microclimate of the place in question and the native habit of the plant. Will a coastal redwood forest fern like a full-sun, low-water spot in my Sacramento yard? Nope. Look to see where the plant in question is from. What is its habitat, cold tolerance, climate and soil where it grows. And then see if any spot in your yard matches this.

Sun exposure, soil drainage (which is key for most natives and low-water loving plants), size, protection from the cold and water/irrigation needs all need to be considered when thinking of "right plant, right place."

What qualities make a plant right for Sacramento?

In general, plants that are right for Sacramento will be able to handle heat and low humidity. In addition, they need to be able to survive winter dips in temperatures including multiple days of frost. Ideally,

these plants will also be able to survive summer months with low water.

What are some of your favorite "right plants" for our area?

*Some of my favorite "right plants" for our area are *Aloe striata* (Coral aloe), *Salvia canariensis*, *Verbena lilacina* 'De La Mina', *Penstemon* 'Margarita BOP', lavender 'Grosso' and Yarrow 'Moonshine'. I like to incorporate both California native plants with those from other Mediterranean zones. I find that this helps to create year round interest and flowers for pollinators most times of the year.*

"In general, plants that are right for Sacramento will be able to handle heat and low humidity."

Marlene Simon, The Plant Lady

What low-water plants do you consider among the easiest to grow in Sacramento?

*Most Aloes are a breeze as long as they are in decent drainage. They can survive spring through fall with no supplemental water. *Bulbine frutescens*, *Teucrium fruticans*, Toyon, Western Redbud and *Leucophyllum frutescens* are tops on my list of the easiest plants to grow in Sacramento.*



California natives mix well with Mediterranean plants, says Marlene Simon, The Plant Lady. PHOTO COURTESY OF MARLENE SIMON

THE PLANT LADY'S EXPERT PICKS

EXPERT PICK:

'Moonshine' yarrow

Favorite for pollinators

EXPERT PICK:

Toyon

California native shrub

EXPERT PICK:

Coral aloe

Colorful low-water succulent



For more water-wise suggestions and resources, go to <https://www.rwa.watersavingplants.com/>.



MAKEOVER CREATES HOME FOR WILDLIFE

Lawn gone, flowering shrubs and perennials **attract bees, birds, butterflies**

By DEBBIE ARRINGTON

In their home's landscape, Julie and David Long planted everything but the oak trees that shade their Granite Bay house. Originally, that included a large front lawn.

For two decades, that grass struggled under the shade of large California live oaks. The only time the Longs spent in their front yard was to mow and do other chores.

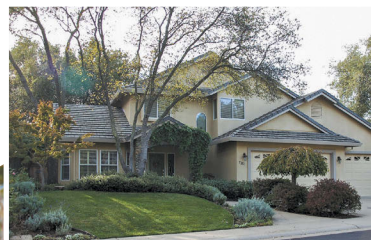
"Then, I became a master gardener," says Julie, a UC Cooperative Extension Master Gardener for Placer County. "It opened my eyes to what (a front yard) could be. (The lawn) was so boring; I wanted something far more interesting."

Her goal: Replace the lawn with low-water pollinator plants that would attract birds, bees, butterflies and other beneficial insects.

Where once lawn struggled, an abundance of colorful perennials now thrive. Hummingbirds, finches and songbirds dart in and out of the oaks to feed on flowers and insects or play in the fountain. Bees buzz everywhere, enjoying the late summer buffet.

"I used a mix of natives and non-natives, so something is always blooming," Julie says. That list includes Emerald Carpet manzanita, California fuchsia, cat mint, clumps of blue grama grass and lots of salvias. Among her eye-catching low-growing shrubs and perennials: Bat face cuphea (with its tubular red-orange flowers), 'Meerlo' variegated lavender ("It glows," Julie says), 'Kaleidoscope' abelia, lantanas, heucheras (particularly native alumroot) and monkeyflowers.

BEFORE: The Longs' former front yard was mostly lawn without much wildlife.
PHOTO COURTESY OF JULIE LONG



AFTER: Five years later, Julie Long enjoys watching her garden's colorful show.
PHOTO BY ANNE STOKES

In her water-wise landscape, she kept some of her original plants, such as the native oaks (of course), but also camellias, roses and Japanese maples. Very established, those shrubs and small trees adapted to the post-lawn transition. Tucked into spare spots are flowering oregano, dwarf plumbago, bulbs and succulents.

"I keep experimenting," Julie says. Her current experiments include a front-yard vegetable garden in a sunny spot next to the driveway and potted blueberries. The Longs' front yard transformation started with a big stack of cardboard. "Our neighbors thought we were crazy!" Julie recalls. "We sheet mulched. We covered the whole lawn with cardboard and weighed it down with rocks so it would stay in place. Then, we covered that with layers of mulch."

Compared to other lawn removal methods, sheet mulching – or lawn lasagna – takes less physical work and no special tools. "It was so much easier," Julie says. "Put it down, leave it alone."

After sheet mulching the lawn in fall, the Longs planted right through the layers the next spring. Five years later, the shrubs and perennials are well established, coping with drought as well as rainy winters. Julie credits more mulch.

"Be sure to have a thick layer of mulch over landscape areas," she says. "It helps big-time with keeping moisture in the soil as well as deterring weeds from germinating."

Now, the Longs spend evenings in their front yard, watching the hummingbirds. "Less water doesn't mean less pretty," Julie says. "In fact, I find this not just pretty, but much more interesting."



HOW TO MAKE LAWN LASAGNA

Sheet mulching is a great way to convert a lawn or other flat landscape area into healthy garden space. Its layers earned this method the nickname "lawn lasagna"; like horizontal composting, those layers "cook down" (decompose) in time.

This method feeds the soil while smothering the grass and weed seed. It also maintains soil moisture, which is critical for both microorganisms and future plants. When ready, plant right through the layers – no tilling necessary.

In Sacramento, sheet mulching is best started in fall to make use of autumn leaves and winter rain. Started now, the planting area will be ready in spring. One small space can be done at a time – or do the whole lawn.

To make your own lawn lasagna, follow these steps for each area of turf to be removed:

1. **MOW** the lawn as short as possible. Leave clippings in place. Mark locations of sprinklers for future reference.
2. **WATER.** Really give the area a deep soaking.
3. **COVER** with two or three layers of cardboard or several layers of newsprint (no glossy paper). Overlap the edges 4 to 6 inches.
4. **WATER.** Thoroughly wet the cardboard or newsprint.
5. **PLACE** a 1-inch layer of compost, steer manure or horse manure over cardboard or newsprint. (Check social media for sources.) Water lightly.
6. **COVER** with a 2-inch layer of fall leaves, straw, shredded newsprint or other dried or "brown" material. Water lightly.
7. **COVER** with a 1-inch layer of "green" material, such as more manure, lawn clippings, garden trimmings or vegetable scraps. Cut green ingredients into 2-inch pieces or smaller. Water lightly.
8. **LAYER** more browns and greens until the area is under at least 12 inches of material. Water lightly after each layer. Finish with a brown layer.
9. **WAIT.** Water only occasionally as needed; compost needs moisture to break down.
10. **PLANT.** In spring, the bed will be ready; no digging necessary. Plant directly through layers.

EXPERT PICK:
Bat face cuphea
Also shown on cover





KEEP TREES GROWING STRONG

Learn ***the bucket method*** to help young trees

By DEBBIE ARRINGTON

Worried about your trees during drought? Grab a bucket—preferably one with a hole near the bottom.

“Using a bucket is a great way to give trees – particularly young trees – the extra water they need, without wasting water,” says Pamela Frickmann Sanchez, Education Program Manager for the Sacramento Tree Foundation.

“A 5-gallon bucket is a really easy way to make sure trees are getting enough water.”

Pamela Frickmann Sanchez

Education Program Manager, Sacramento Tree Foundation

So easy that children can do it, “bucket watering” is the zen method of tree irrigation – slow, steady and as Mother Nature would do it. This simple solution also can help train young trees to grow deep roots, helping them become established and more drought resistant.

“People need to water them, especially young trees, to keep them healthy,” Sanchez says.

Sacramento trees most likely to show drought stress include coastal redwoods, birches, red maples and tulip trees.

During very dry conditions, young trees of all kinds are most at risk, particularly under 5 years old. Those

same saplings benefit most from bucket watering – even if they’re growing in the middle of a lawn.

“The first few years, trees need about 10 to 15 gallons extra water a week, preferably split into two times a week,” Sanchez explained. “If you do have lawn, water from the lawn sprinklers is not adequate to get trees established. They need their own thorough soak. A 5-gallon bucket is a really easy way to make sure trees are getting enough water.”

Sacramento’s heavy soils need slow water application to allow moisture to soak in. “Don’t leave the hose running,” Sanchez said. “If you just dump 5 gallons on your tree, water runs off too quickly. Using the bucket method, you know exactly how much your tree is getting.”

SacTree staff experimented and found a single 1/8-inch hole – located on the bucket’s side about 1 inch above the bottom – was most effective. On the bottom, the hole got clogged with dirt. Multiple or bigger holes, the water drained too fast.

Cover the hole with tape, fill the bucket, and place the bucket close, within a foot of the trunk to newly planted trees, as their root ball still hasn’t spread out, and then remove the tape. Alternate sides with each bucket application. As the tree grows, move the bucket farther away from the trunk. The feeder roots that need the extra water most are located along the dripline at the edges of a tree’s canopy.

Mulch will help your trees keep that moisture longer. Apply 2 to 4 inches of organic mulch (wood chips, bark, leaves, etc.) out to the tree’s dripline, leaving 6 inches of space between trunk and mulch. ✂

PHOTO COURTESY OF REGIONAL WATER AUTHORITY

HOW MUCH WATER?

Trees, especially young trees, need additional irrigation to grow strong and healthy. Using a 5-gallon bucket makes it simple. For mature trees, use a soaker hose. Here are recommendations from the Sacramento Tree Foundation:

TREE AGE

1 year

2 years

3 years

3+ years

FREQUENCY

2-3 times a week

Once a week

Every other week

Once a month

AMOUNT

5 gallons

10 gallons

15 gallons

Use a soaker hose at dripline for one hour.

NEED A NEW TREE?

The Sacramento Tree Foundation has "The Shady Eighty," tree recommendations for a cooler Sacramento region. Search for the right tree for the right place in your landscape.

Find the searchable list at:
www.sactree.com/shady80



AVOID THESE RENOVATION MISTAKES

Take care of your soil, trees during **water-wise transition**

By DEBBIE ARRINGTON

Landscape designer Soleil Tranquilli has seen what happens when people just stop watering their landscapes. Trees die. But so do billions of microbes.

Without moisture, our clay-heavy soil dries into rock-hard brick, killing tree roots as well as vital microscopic soil organisms. Plants can't live without them.

"That's one of the hardest mistakes to correct," says Tranquilli, owner of Tranquill Gardens in Elk Grove. "Once that moisture is gone out of the clay, it's so hard to get it back in. ... If you start to see cracks in the sod, it's

gone way too far."

There's an easy solution: Mulch. That helps preserve the soil's moisture content. Then, take care of the trees with judicious, targeted deep irrigation.

Both soil and tree care are important during water-wise renovations, which continue to be popular, Tranquilli says. "People want to do the right thing, but don't know what that is."

Here are more renovation do's and don'ts, courtesy of Tranquilli:

Do...

PLAN AHEAD. "It's totally worth it!" Tranquilli says. "You're spending thousands of dollars on installation. Strategize! Have a design plan; even if it's to be phased in over time, have a vision on paper." That planning should include a soil test to see what nutrients may be needed.

MAKE USE OF REBATES and resources. Contact your local water provider. Read rebate details before you rip out the grass.

RESEARCH PLANTS. Don't just buy what you like. Be thoughtful about combinations; use plants with similar water, sun and soil needs.

SAVE PLANTS from your former landscape. Especially keep plants that will fit with lower water use and are already established. Trees in particular can anchor the new water-wise garden. Camellias and roses are both drought-tolerant. So are many popular perennials such as daylilies, irises and agapanthus.

UPGRADE IRRIGATION. Replace sprinklers with a drip system. Put plants with like water needs together.

MULCH, MULCH, MULCH! That fills in the space between new plants, cuts down on weeds, feeds the soil and retains moisture.

PLANT TREES. "Especially small desert trees that grow fast. Always layer in tough, blooming, small trees and large shrubs for birds to hang out." Among Tranquilli's favorites: Desert willow, Desert Museum palo verde and pineapple guava.

PLANT LOW-WATER NATIVES. They support native bees and other local wildlife. "Please, please, please add California native plants to your new landscape. Request them!"



Don't...

THINK LOW-WATER is rock and cactus. (It's not!)

START WITH PLANTS instead of soil. Improve your soil before you buy the flora.

IGNORE INVASIVE PLANTS. Get rid of the nutsedge and bindweed before replanting.

TRY TO PLANT in a Sacramento heat wave. The best time for planting: Fall and spring.

PUT GRAVEL (OR ROCK) mulch over existing tree's roots. That just adds to heat stress. Use organic mulch instead.

NEGLECT TO WATER new plants. All plants — even low-water — need extra irrigation when transplanted.



EXPERT PICK:

Pineapple guava
Both flowers & fruit are edible



EXPERT PICK:

Desert willow
Beautiful, small, low-water tree



Make the most of *the water we have* with these *smart ways* to save

Native to climates like ours, some plants cope better with Sacramento's summer heat and dry-year cycles. But it's not just the plants that make a landscape smart. Simple upgrades in irrigation hardware and other features can add up to less water use, work and green waste. That means more time to enjoy your outdoor living space! Here are ideas to get you started.



EXPERT PICK:
Zelkova
Suggested by
El Dorado
Nursery



EXPERT PICK:
Western redbud
Suggested by
Elderberry Farms
Native Plant
Nursery



EXPERT PICK:
Autumn sage
Suggested by
Big Oak
Nursery



EXPERT PICK:
Lantana
Suggested by
The Plant
Foundry



EXPERT PICK:
Cotoneaster
Suggested by
High-Hand
Nursery



EXPERT PICK:
Grevillea
Suggested by
Green Acres
Nursery &
Supply

Drip irrigation
Saves 15 gallons
per 500 square feet
each time you water

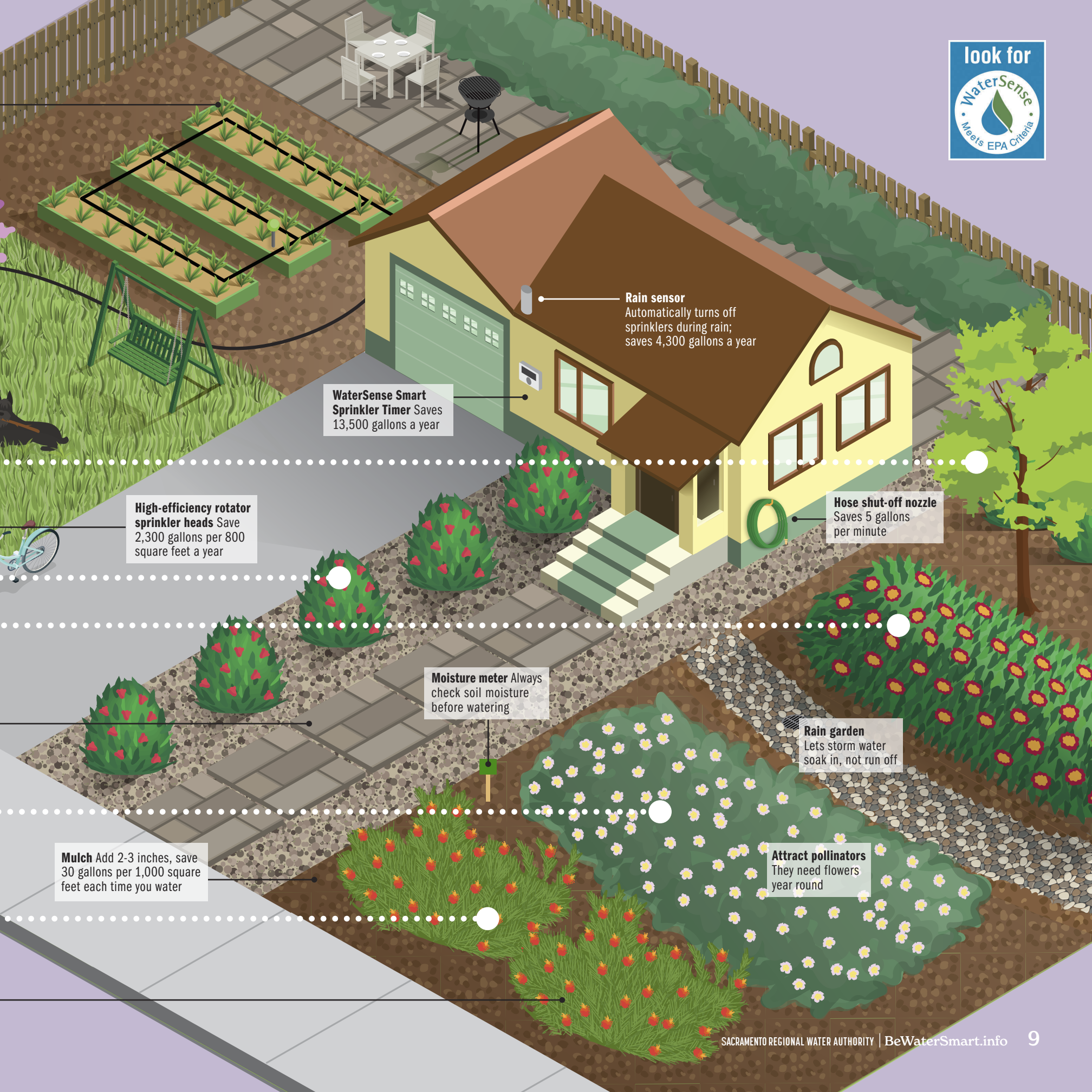
Soaker hose
Allows deep
watering of trees

Low-mow or no-mow turf
Easy-care grasses use half
the water of traditional turf

Limit the lawn
Just enough space
for pets and play

Permeable paving
Allows water to soak
into soil, stay on site

**Low-water trees,
shrubs and perennials**
Compared to grass, save 90
gallons per 1,000 square feet
each time you water



Rain sensor
Automatically turns off
sprinklers during rain;
saves 4,300 gallons a year

**WaterSense Smart
Sprinkler Timer** Saves
13,500 gallons a year

**High-efficiency rotator
sprinkler heads** Save
2,300 gallons per 800
square feet a year

Hose shut-off nozzle
Saves 5 gallons
per minute

Moisture meter Always
check soil moisture
before watering

Rain garden
Lets storm water
soak in, not run off

Mulch Add 2-3 inches, save
30 gallons per 1,000 square
feet each time you water

Attract pollinators
They need flowers
year round

PLANT TREES FOR THE FUTURE

When planting trees, think ahead – way ahead. “Planting a low water-use, climate-resilient landscape is the smart thing to do,” says Pamela Frickmann Sanchez, Education Program Manager for the Sacramento Tree Foundation. “What will conditions be like 50 years from now? When you plant a tree, you’re planting for your grandchildren.” Experts anticipate the Sacramento region to be hotter and dryer in decades to come; keep that in mind when choosing a new tree.

Also consider tree diversity, Sanchez said. Having many different kinds of trees in a neighborhood’s landscape makes for a healthier urban forest. Why? Invasive pests and disease. “You can see some pests coming, some are a surprise,” Sanchez said. “That’s why diversity is key – you can’t predict what might be effected.”

The Sacramento Tree Foundation has plenty of recommendations for the greater Sacramento area. Search for the right tree for the right place in your landscape. **Find the searchable list at: www.sactree.com/shady80.**



EXPERT PICK:
Desert Museum palo verde
Suggested by **Green Acres Nursery & Supply**



EXPERT PICK:
Marina strawberry tree
Suggested by **Green Acres Nursery & Supply**

Consider these water-wise trees for Sacramento: Palo verde, a desert native, and Marina strawberry tree, a colorful evergreen.
PHOTOS COURTESY OF GREEN ACRES NURSERY & SUPPLY



A river-friendly landscape can be full of color and life. *PHOTO BY VICKI ANDERSON, COURTESY OF GARDENSOFT*



COPING WITH CHANGE

Climate-wise landscapes are *ready for extremes*

By *DEBBIE ARRINGTON*

Cheryl Buckwalter has seen the change. The longtime Sacramento-area landscape designer and educator creates river-friendly landscapes with the future in mind, but her plant choices have had to evolve along with our weather patterns.

Our beloved Mediterranean climate is shifting towards Sonoran, the desert climate of Arizona and northern Mexico.

“It means that we and our gardens will be experiencing hotter temperatures and more extreme heat waves for longer periods of time,” she explains. “As we’ve already experienced, we can anticipate wetter rain events — and unusually less rain and snow events in the fall and winter months. It means that we need to be more diligent than ever to be objective when making plant choices. ... Plan for worsening conditions. That’s the harsh reality.”

“Plan for worsening conditions. That’s the harsh reality.”

Cheryl Buckwalter
River-friendly landscape expert

When planning landscape renovations, select plants that can withstand intense heat, drought conditions and dry summers, Buckwalter says.

In the “Sunset Western Garden Book,” consider Zones 12 and 13 instead of Sacramento regions’s typical Zones 9 and 14.

That doesn’t mean to adopt a desert aesthetic. Instead, help your landscape cope by preparing for extremes.

“Practice the watershed approach to landscapes, which is simply to use healthy soil-building techniques,

climate-appropriate plants, rainwater as a resource, and efficient irrigation technology,” explains Buckwalter.

These principles are part of the backbone of river-friendly landscaping. Build soil health with organic mulch (leaves, chipped wood, etc.) and compost; that supports plant health and moisture retention, too. Keep any rainwater onsite instead of running off by creating “rain gardens” or swales. Then, grow plants that, once established, can thrive with little or no additional summer irrigation.

“Rocks used as mulch is not the answer,” Buckwalter says. “They absorb and give off heat. They do not benefit the soil or soil life. And, with excessive use, they can be just plain ugly.”

Can individual gardeners do anything to help cope with climate change?

“Reconnect with nature,” Buckwalter urges. “Embrace a new aesthetic. Become stewards of landscapes that go beyond sustainability and move into the realm of regeneration – landscapes that become better over time and provide numerous benefits to the environment and ecosystems.”

That starts with small steps. Plant trees and care for the ones you already have. Nurture your soil with compost and organic mulch. Plant native plants to support native wildlife. Help the bees; use plants with nectar-filled flowers to provide year-round food sources. Grow mostly low-water plants that need little if any extra irrigation.

“Become a climate-change champion,” Buckwalter adds. “Learn about the steps you can take to create biodiversity in your landscape. Get involved and give back. There are many ways to do this in your community and with organizations that need support. Find one that is the best match for you and your family, your schedule, your passion.”





Auburn's Maidu Fire Station replaced its lawn with fire-wise, water-wise landscaping. See a list of plants used in this makeover at pcwa.net. PHOTO COURTESY OF PLACER COUNTY WATER AGENCY



YOUR LANDSCAPE CAN HELP PROTECT YOUR HOME

‘Firescaping’ makes most of water *while resisting flames*

By DEBBIE ARRINGTON

Can you fight fire and save water at the same time? With thoughtful planning and planting, your landscape can help protect your home from wildfire while also cutting down on water use.

It’s called “firescaping,” a combination of fire-wise and water-wise landscape concepts that may be the perfect blend for drought-challenged, fire-prone California.

“Firescaping has a dual purpose; it’s the process of creating a landscape that’s resistant to fire that uses resources as efficiently as possible,” explains Kevin Marini, community education specialist for the UC Cooperative Extension Master Gardeners of Placer and Nevada counties. “In California, that resource is water.”

Firescaping is different from most water-wise landscaping techniques in that the focus is to retard fire danger while at the same time cut down on water use – and still have a beautiful, enjoyable, vibrant landscape.

“As a gardener, you need to retrain your brain,” Marini says. “As gardeners, we tend to pack a landscape with as many plants as possible. We layer them in borders and beds, and keep adding more. Typically, landscapes are lush with different levels of plants, from groundcover to shrubs to trees. But that lushness is not enough to protect it from fire.”

However, all those packed plants can be potential fuel for a wildfire. Firescaping trades lushness for leanness.

“It looks different from a traditional landscape,” Marini explains. “There’s space between plants instead of continuous borders or packed beds. It’s mostly a collection of low-growing plants, spaced well apart.”

Auburn’s Maidu Fire Station replaced its lawn with fire-wise, water-wise landscaping three years ago. It now looks beautiful year round while serving as a fire-wise example.

“Besides the fire-wise/water-wise components, the fire

station looks beautiful and requires minimal maintenance,” says Battalion Chief Robert Zaucha. “We are proud of the way it looks and happy to show it off to the community.”

In firescaping, start by creating “defensible space,” a zone that extends 100 feet in all directions from your home or any other structures on your property.

“Defensible space increases the odds of all surrounding homes survival,” Zaucha says. “Once homes ignite, they can radiate enough heat to catch surrounding structures and vegetation on fire.”

“As a gardener, you need to retrain your brain.”

Kevin Marini

Community education specialist, UCCE Master Gardeners of Placer and Nevada Counties

According to CalFire guidelines, the 5 feet closest to a building is most critical.

“You don’t want anything close to the house that an ember can catch fire,” Marini says. That includes mulch as well as plant material. Instead of wood chips, gravel or rock mulch is best in that first 5 feet.

Water-wise gardening depends on mulch to retain soil moisture. Firescaping also makes use of mulch, but not as thick – just 1 or 2 inches. Deeper mulch allows embers to smolder. Also, think about the mulch’s flammability. Gorilla hair or shredded bark are highly flammable.

When landscaping, consider how a wildfire spreads. Clumped bushes under taller trees give flames a leg up into branches. Trees that overhang your roof can drop embers.

FIRE-WISE AND WATER-WISE

A big difference between firescaping and low-water gardening: Plant choice. Such favorite low-water Mediterranean plants as rosemary burn easily due to the high oil or resin content in their leaves. Evergreen conifers such as pines also may not be fire-wise – even though they may be native. Low-water native grasses tend to burn rapidly.

“Plant material that has high levels of moisture in their leaves and an open structure are preferred,” says Jeff Ambrosia of Yamasaki Landscape Architecture in Auburn. “Dense shrubs that contain oils or resins on their leaves like juniper or cypress are extremely flammable. Plant material that does not accumulate dead branches or leaves will require less maintenance and will not provide an ignition source for fire.”

Some plants have natural fire retardants. “Plants with waxy leaves will resist hot embers,” says Ambrosia. “Hardwood trees like maple and cherry will be less combustible than cypress, fir and pine.”

Here are Ambrosia’s fire-wise, water-wise suggestions:

GROUND COVER

Pt. Reyes Manzanita
Ceanothus
Phlox
Yarrow

PERENIALS

Columbine
Carex
Coreopsis
Delphinium

Day Lily

Hosta
Lavender
Lupine
Salvia

SHRUBS

Butterfly Bush
Cistus
Cotoneaster
Mahonia

Nandina

Russian Sage
Spiraea
Lilac

TREES

Maple
Redbud
Dogwood
Crabapple
Oak

Any plants close enough to touch leaf to leaf can be a fire danger. That includes many traditional borders or hedges.

“The outside of a hedge may look green, but the inside can be all dead wood,” Marini says. “The middle of the hedge is a major fire danger. It can go up like a torch.”

No landscape is “fireproof,” Marini notes, but design, materials and plant choice can make a huge difference in determining if a spark catches or flames spread. So does proper irrigation. Make sure plants get the water they need to stay healthy.

“The biggest part of firescaping I learned: Keep plants really healthy, watered and well spaced,” Marini says. “A healthy plant has a much better chance for survival – from drought or wildfire.”





SIMPLE SWITCH MAKES HUGE DIFFERENCE

Your lawn can be greener with the **right sprinkler nozzle**

By DEBBIE ARRINGTON

What's the smartest sprinkler for your yard? It's the one that puts the right amount of water where it's needed — and not down the storm drain.

Drop size matters, too. It's not just the spray pattern, but how that moisture is delivered.

High-efficiency sprinklers, also known as rotator sprinklers, push out steady streams of big droplets at a rate that's easier for most soils to absorb, particularly the heavy clay soils that are common in the greater Sacramento area.

"With the larger droplet size, water is more likely to get where you want it to go," says expert Tom Noonan of Ewing Irrigation.

Traditional sprinkler heads aren't smart at all. "A spray pattern nozzle is just a piece of plastic with an engineered hole," Noonan notes. "How big and what shape of the hole determines where the water goes. Those nozzles tend to wear out over time. Every time that sprinkler pops up, any inefficiencies are repeated over and over."

Compared to those simple nozzles, multi-stream, multi-trajectory rotating sprinklers can save an estimated 30% of water use.

Indications of sprinkler problems often are obvious: Dead landscaping where water isn't reaching

and puddles where too much water accumulates. By distributing water more evenly at a rate even heavy clay soil can absorb, high-efficiency sprinklers can help lawns and landscape look their best while saving water, too.

"You're not just spraying in one place; the streams are rotating around so your landscape gets the benefit of multiple streams," Noonan explains. "The streams also go different distances, so the water is getting to different areas within a circular pattern – near, far and in between. Much more of the circle is actually getting water."

High-efficiency sprinkler heads are easy to install, Noonan says. "You're retrofitting heads, not the whole system."

Water pressure also plays a role in efficiency. Traditional sprinkler systems were designed for 30 to 50 pounds per square inch (PSI). Too much pressure pushes out too much water too fast in a misty spray that drifts and quickly turns to runoff. High water pressure also causes uneven distribution within the sprinkler system. (Some water providers offer free water pressure checks.)

"Excess pressure equals a colossal water waste," Noonan adds. Pressure-relegated sprinklers, the new standard for California landscapes, can solve that

problem and cut down on water waste. Installing these new sprinkler bodies is another easy fix.

"New pressure-regulated sprinkler bodies and rotating heads go hand in hand to getting the most efficiency out of your sprinkler system," Noonan says. ✿

Check with your local water provider about available rebates for irrigation systems and sprinkler nozzle upgrades. Visit BeWaterSmart.info for details.



THESE LAWNS LOOK GREAT WITH LESS WATER AND LESS WORK

TALL FESCUE

Recommended for play areas and pets, this turf grass is renown for its toughness. With heavier blades, tall fescue requires less water and fertilizer than other turf grasses. It also withstands summer heat and foot traffic. A healthy tall fescue lawn can bounce back quickly after drought stress. Mow at 2 to 3 inches; that encourages deep roots.

BUFFALO GRASS

This warm-season native grass puts down deep roots, which help it stay lush and green with only weekly irrigation (or less), even in 100-degree summer heat. It's transplanted by plugs, not rolled sod (the roots are too long), and grows slowly (less mowing). Dormant in winter, buffalo grass is best transplanted in spring and prefers clay soil.

SHEEP FESCUE

Slow-growing and green year round, this low-water cool-season grass tolerates a wide range of soils and weather conditions, from cold and wet to hot and dry. Mowing is optional. Once established, it needs just 10 inches annual precipitation. (Sacramento averages 17 inches.) Sheep fescue can be transplanted in fall.

BLUE GRAMA

Another native American grass, blue grama, needs good drainage and prefers sandy soil. But like buffalo grass, this warm-season grass thrives in summer heat with little irrigation. Left unmowed, it forms interesting flag-like seed heads and turns golden in winter.

WHITE CLOVER

Not a grass but a member of the bean family, this low-growing clover forms a thick, lush, green lawn that can tolerate poor soil with less water, little mowing and no fertilizer. Bees love its flowers. Another plus: Clover is unaffected by dog urine.





MAKE YOUR SPRINKLER SYSTEM SMARTER

New controllers **take guesswork out** of irrigation

By DEBBIE ARRINGTON

You can save water, money — and your lawn — with the help of a smart sprinkler timer. This device allows your landscape's irrigation system to be as efficient as possible by tuning into weather and soil conditions. It can immediately make a big difference in home water use, as well as the health of your plants.

"Really popular right now are wifi-enabled controllers," says Don Smith, water management coordinator for the City of Folsom. "(This controller) gets weather information off the Internet. It's also easy to adjust. It allows you to use your smartphone, computer or any enabled device to do scheduling. ... For the average homeowner, it has a huge impact and is great for water saving."

Temperature and moisture levels, both in air and soil, can widely fluctuate. For example, July's record temperatures range from an all-time high of 114 degrees to a low of 48. It rarely if ever rains in July in Sacramento, yet July's relative humidity averages 46%.

Smart controllers take the guesswork out of adjusting irrigation to fit those swings in temperature and moisture.

"They're a huge departure from traditional timers," Smith says. "You don't see all the buttons and dials. It's a lot less confusing. People are thrilled about how easy it is to check the system. You can go around the yard with your smartphone, turning sprinklers on and off, while you're standing there watching instead of running back and forth to the control box."

Smart sprinkler timers or controllers take the guesswork out of how often to water and how much.

"We've found the average homeowner uses 200 to 300% (more water than) their landscape actually needs," Smith says. "They have all these preconceived ideas and water the heck out of everything all the time."

Watering less often but deeper actually helps most plants, including trees, shrubs and lawns. Fruit trees that never bore fruit finally produce a crop. Shrubs and perennials flower more. Lawns look healthier.

"I've helped people schedule (irrigation) and seen huge changes in their gardens," Smith says.

Installing a smart controller is easy, Smith says. "All you need is a screwdriver. Match up the wires to the same color-coded ones used in the old control box."

The key to making a smart controller truly smart: Inputting correct information.

"The trick is when you first program it," Smith says.

"It will ask you a series of questions for each (irrigation) zone: What type of irrigation equipment? What type of plant material? What's the slope? What's the soil type? And that's where people mess up – soil type. They answer 'loam.' That's not Folsom. Our soil is clay and cobble. As long as you set the profile questions right, it will work correctly."

A smart controller is an important part of an overall more-efficient home irrigation system.

"We've found the average homeowner uses 200 to 300% (more water than) their landscape actually needs."

Don Smith, Water Management Coordinator, City of Folsom

At his own home, Smith replaced his lawn's pop-up misting heads with high-efficiency rotator nozzles. For new low-water landscaping in his backyard, he laid out driplines with inline emitters in an 18-inch grid. The driplines actually sit on top of the soil, but under 3 inches of mulch; that makes the lines accessible and easy to adjust. Both the rotator nozzles and the driplines cut down on evaporation and water loss.

Smart controllers work well with drip systems, too, allowing for slow and deep irrigation. "Any time you can change out spray to drip, you'll save water — if used correctly," Smith says. "It's a problem if run too long. Drip systems run less frequently but much longer."

A smart sprinkler timer or controller is easy to install and even easier to use.

FIVE THINGS TO LOVE ABOUT A SMART SPRINKLER TIMER

1. NO MORE GUESSWORK

Wifi-enabled controllers automatically check weather reports via the Internet, and adjust irrigation as needed.

2. SAVE WATER, SAVE MONEY

A smart timer knows when to turn irrigation on and how long to run; there's less runoff and less waste.

3. HEALTHIER PLANTS, GREENER LAWN

When properly irrigated, all plants prosper. Water gets a chance to soak in and reach roots.

4. JUST LIKE AN APP

Operate your irrigation system via your smartphone, computer or other advice – from anywhere.

5. EASIER TO CHECK FOR PROBLEMS

Turn on the sprinklers via your smartphone while standing next to the sprinkler head; no more running for the control box!

REBATES ARE AVAILABLE!

Contact your water provider about possible rebates for smart irrigation upgrades including a smart sprinkler timer, rotator sprinkler heads, drip systems and more. See bewatersmart.info/rebates-services.



NOT TOO THIRSTY VEGGIES, FRUIT

Most food crops will take as much water as they can get, but some will still produce – and even thrive – with less irrigation. Here are suggestions from Shawn Harrison of Soil Born Farms:

TOMATOES: One large tomato plant uses the same amount of weekly water as 1 square foot of lawn. They also can take Sacramento's heat. "Tomatoes are surprisingly resilient," Harrison says. "That's good, since that's what Sacramento is known for. Tomatoes are tough. They can grow deep roots and get by with only weekly, deep irrigation."

LETTUCE: Once established, this cool-season crop makes the most of winter rain with little additional irrigation. Mulch helps retain moisture around its shallow roots.

ARUGULA: Like lettuce, Italian greens do well in Sacramento even during dry winters.

ONIONS AND GARLIC: They're bulbs; they have their own built-in resources.

HERBS: Oregano, rosemary, lavender, lemon verbena and other aromatic herbs naturally love our Mediterranean climate.

POMEGRANATES: Actually a large shrub, this Mediterranean favorite can survive years of severe drought, then bounce back quickly with renewed irrigation.

OLIVES: This ancient crop also offers great drought tolerance. Trees can live generations.

GRAPES: This California favorite prefers our hot, dry summers. New varieties are more disease resistant.

Soil Born Farms' American River Ranch in Rancho Cordova uses mulch between rows of crops to preserve soil moisture. PHOTO COURTESY OF SOIL BORN FARMS



GROW FOOD WITH LESS WATER

Lessons *can be learned* from Soil Born Farms

By DEBBIE ARRINGTON

Along the banks of the American River, Soil Born Farms has been growing food sustainably for more than 20 years.

"During that whole expanse since 2000, we've been in a drought cycle," says founder and co-director Shawn Harrison. "We're very conscious of water conservation and preserving soil moisture."

In Northern California, water is a precious resource for any farmer, whether growing food by the acre or the 1-gallon pot. Farmers have learned to make the most of available moisture, including what crops can grow with less water.

"We're looking at what not to grow, such as celery — it's just too water sensitive," Harrison says. "We're also looking at more perennial crops such as pomegranate, olives and grapes."

Soil Born is also experimenting with two non-traditional crops: elderberry and oak.

"Historically, elderberry grows in great abundance in Sacramento, but it's not farmed," Harrison says. "It's extremely drought-tolerant and uses less resources to produce (than other berries)."

"We're growing oaks for the acorns to produce acorn flour," he adds. "We're trying interior live oaks that are native to our elevation. They require minimal fertility and irrigation, and also provide very good habitat for wildlife."

Soil Born's 55-acre American River Ranch in Rancho Cordova has been farming since the 1840s. During its 170 years, the ranch has experienced many more dry years than wet.

"The lessons we've learned as farmers are applicable to home gardeners, too," Harrison says.

Soil Born Farms uses three methods to conserve soil moisture: cover crops, tarps and mulch.

"When a field is fallowed, it doesn't mean you're not growing something," Harrison explains. "The Dust Bowl model people are used to seeing is inaccurate. You need to grow a cover crop to keep the soil in place."

That cover crop — such as buckwheat or Sudan grass — is also a tool. "It's living mulch," Harrison says. "It seems counter intuitive, but it's actually conserving water (to grow something). The cover crop shades the soil and preserves the soil's biology including the capacity of the soil to hold nutrients."

Before the cover crop can go to seed, it's mowed — either mechanically or by animals. The remainders are left in place and covered with occultation tarps. (Occultation means "to hide from view.")

"(Occultation tarps) are black tarps that don't degrade," Harrison explains. "You stretch them over the mowed crop residue. It prevents sunlight from germinating weed seed. Whatever residual moisture left in the crop, the tarp preserves it. You'd think it would get hot, but under the tarp, the soil stays cool, so the biology stays active and it decomposes the crop residue. So, you're not only preserving moisture, but feeding the soil. You're taking advantage of the biomass."

Mulch may be most useful for the backyard farmer. At Soil Born, a 3- to 4-inch blanket of mulch insulates the soil around plants and trees, as well as covers paths between planting beds.

"It preserves moisture throughout the whole system," Harrison says.



EXPERT PICK:
Pomegranate
Beautiful flowers and fruit



TENGA UN HERMOSO JARDÍN Y AHORRE AGUA TAMBIÉN

Experto en **paisajismo ofrece consejos** para los residentes del área de Sacramento

por EDGAR SANCHEZ

Cada jardín diseñado por Martín Carrión van Rijn florece con lo que él describe como “una sinfonía de colores, texturas y ritmos” en armonía con la naturaleza. En el 2009, Martín estableció su despacho de diseño de jardinería Landscape Symphonies, o Sinfonías de Jardín. Un paisajista de tercera generación, Carrión es el diseñador principal de la agencia de jardines personalizados, y es reconocido como un experto superior

“Muchas plantas necesitan muy poca agua ... no solamente para sobrevivir una sequía, sino para prosperar cuando una ocurre.”

Martín Carrión van Rijn
Landscape Symphonies

en jardinería en California. Actualmente él administra la Asociación de Paisajistas Profesionales, Capítulo de California, y vive en Oregon House, Condado de Yuba, donde está basada su empresa. Carrión promueve consejos para conservar el agua en la jardinería, para la Autoridad Regional del Agua (Regional Water Authority

o RWA). Edgar Sánchez recientemente entrevistó a Carrión, practicante de la jardinería por 29 años. Aquí, las preguntas y respuestas, las cuales han sido editadas debido a espacio limitado.

Pregunta: ¿Porqué los residentes del área de Sacramento deben reducir el uso del agua en sus jardines?

Respuesta: California está sufriendo una grave sequía. El agua está escasa. Nuestras presas están severamente agotadas y una de las áreas donde la mayoría del agua se desperdicia es en los jardines. La mayoría del uso del agua y su desperdicio ocurre durante el riego del césped.

P: ¿Si uso menos agua, todavía puedo tener un jardín admirable?

R: Absolutamente. Muchas plantas necesitan muy poca agua, no solamente para sobrevivir una sequía, sino para prosperar cuando una ocurre. Muchas de estas son muy atractivas y pueden reemplazar algunas de las plantas moderadamente o altamente dependientes del agua, a las cuales nos hemos acostumbrado a tener en nuestros jardines.

P: ¿Cuáles son algunas maneras fáciles de ahorrar agua en mi jardín?

R: Primero, asegúrese de que este regando su jardín eficientemente con un sistema de riego automático que funcione correctamente. Compruebe que los aspersores de riego no estén rotos, que estén derechos, y que la presión no este muy alta o muy baja, lo cual asegura una cobertura adecuada para el césped. Además, cerciórese que las boquillas no estén obstruidas.

Lo mismo se puede hacer con sistemas de goteo.

Un horario de riego adecuado también es vital. La pagina web de la ciudad de Sacramento tiene una calculadora de riego para la jardinería regional. (CityofSacramento.org conservación de agua.)

“Un suelo sano está repleto de vida,” dice Carrión. “Una cucharilla de buena tierra de jardín contiene billones de bacterias invisibles, insectos y otros microbios beneficiosos. Estos unen el suelo, y ayudan a mantener las enfermedades bajo control. También, con aire y agua adecuados, trabajan con las raíces para transformar la tierra parecida a un ladrillo en un suelo sano”.

P: Cuáles son sus plantas favoritas que no usan mucha agua, para sembrar en Sacramento?

R: Yo recomendaría usar plantas nativas locales, arbustos como Berries de Café, Mound San Bruno o Sambucus nigra. Y hay otras nativas de California que me gustan, como varias clases de Grosellas, Árbol de Judas Occidental, y otros arbustos de especias occidentales. Entre las que no son nativas, Romero y varias salvias son adecuadas para la mayor parte de la región de Sacramento.

P: Dónde puedo obtener información sobre descuentos y recursos?

R: Puede hacerlo visitando el sitio web de RWA: <https://bewatersmart.info>.

To read this story in English, go to:



ELECCIÓN EXPERTA:
Coffeeberry

Martín Carrión van Rijn
FOTO POR SVETLANA SLADKOVA



ELECCIÓN EXPERTA:
Spice bush

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We're always looking for more inspiration. Submit photos of your own water-wise landscape or makeover to BeWaterSmart@rwah2o.org or share via Facebook [@BeWaterSmart](https://www.facebook.com/BeWaterSmart).

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