

Welcome

Who are UC Master Gardeners?

We are UC trained volunteers whose mission is to assist Tahoe residents to cultivate beautiful Tahoe Friendly gardens that both protect and enhance our natural environment. We do our work through workshops, plant sales, demo gardens, tours and educational materials.

- Thank You to Our Partners: South Tahoe PUD,
 Friends of the Library, South Tahoe Public Library
- Breaks
- Donations

Today's Master Gardener Team

Presentering:

Jen Cressy

Becca Cunningham

Kathy Maston

Megan Suarez-Brand

Bonnie Turnbull

Supported by:

Cyndy Brown-Carlson

Vicki Schussel

Jeanne Benin

Lynne Brosch



BB's Garden

Our Inspiration!

- + Revived last spring
- + Demonstration garden
- + Collaborative project

FOL maintains our garden and values help from others who want to keep our library vibrant and beautiful.



Would you like to help?



Contact:

JEANNE BENIN

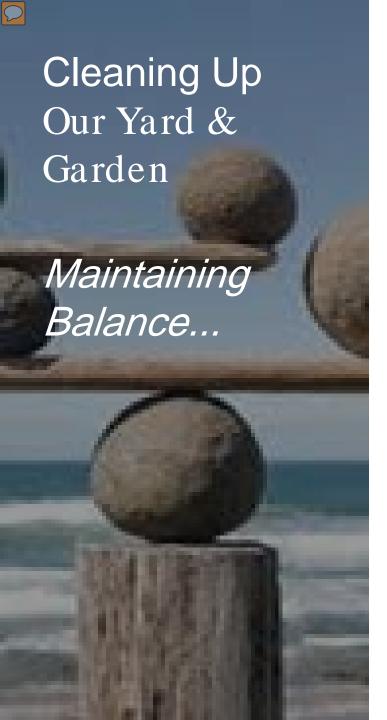
jlbenin@charter.net

Gardening Through the Seasons: Spring

- 1. Introduction
- 2. Garden Clean-up
- 3. Weeds
- 4. Spring Planting
- 5. Pests



- 6. Spring Lawn Care
- 7. Water Needs
- 8. Irrigation Start up
- 9. STPUD Programs
- 10. Pruning
- 11. Improving your Soil
- 12. Mulch and Compost
- 13. What's Next?



When and what should you rake?

Needles? Fall or spring?





Yard & Garden Clean up-- *Tools*

- Gloves
- Rake
- Wheelbarrow
- Biodegradable bags or garbage cans
- Cutting tools
 - Pruning shears
 - Loppers
 - Hand saw





Yard & Garden Clean up-Flower Bed Clean Up

Assess & trim back plants

- Ornamental grassescut back to ground
- Remove
 - perennials previous year's growth
 - dead annuals
- Be careful of new bulb growth. Be delicate
- Wait for late rising plants







Yard & Garden Clean up Pet Waste

Pet Waste is not Fertilizer!

- Doesn't contain the right nutrients
- Might have bacteria and/or harmful parasites
- Takes a really long time to break down.
- Degrades water quality

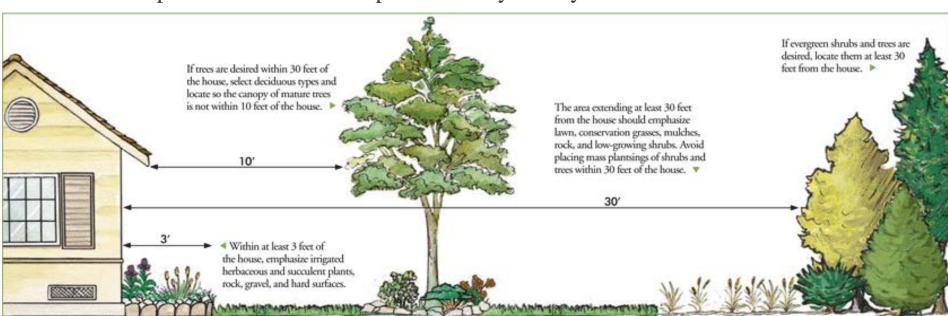




Yard & Garden Clean up Fire Adapted Gardening

Tips to ensure your yard & garden are fire adapted:

- Rake up pine needles in the spring (leave in the fall)
- Cut back stems & woody foliage
- Eliminate ladder fuels
- Remove flammable woody plants near any structure
- Complete a defensible space survey with your local fire district





Manage pest and weeds with the least toxic approach = "Integrated Pest Management".

University of California
Continuing Education Website:
http://ipm.ucanr.edu/

Home, Garden, Turf & Landscape Pests



What is the difference between noxious and invasive weeds?

<u>Invasive weeds</u> are plants that:

- Spread aggressively
- Choke out natives /other desirable plants

Noxious weeds

- Invasive
- Listed in CA or NV law
- Particularly destructive, competitive, and difficult to control





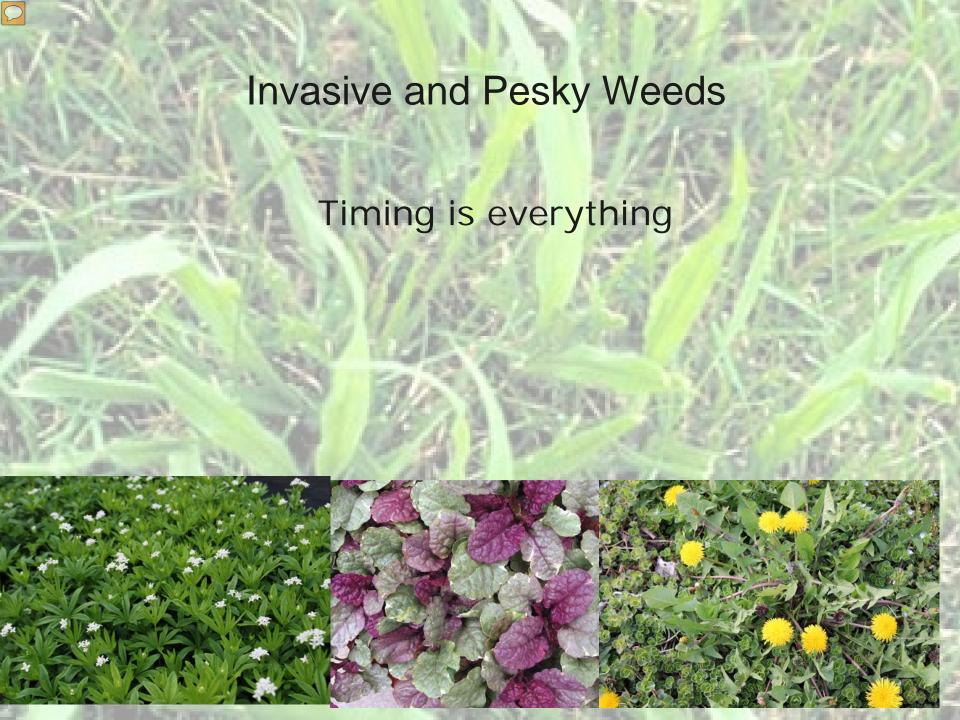
Noxious Weeds

The Lake Tahoe Basin Weed Coordinating group can help you learn how to identify and control specific noxious weeds. Learn more here:

http://tahoeinvasiveweeds.org/weeds/management.php





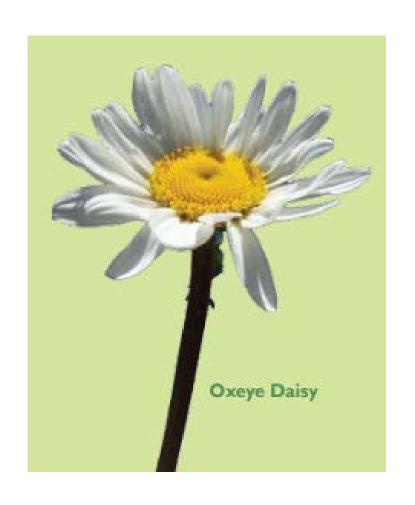




Weeds respond differently to different methods.

Types of Control

- Mechanical
- Chemical (Always read herbicide labels carefully)





Mechanical Removal: Tools of the trade





Chemical controls

- Herbicides i.e. Round Up JUST SAY NO!
- Weed and Feed products are not Tahoe Friendly
- Check IPM Website for alternatives www.http://ipm.ucanr.edu/





Exclusion Techniques

Physical Barriers

Sheet Mulching



When can I start planting?

- When you can work the soil
- When the aspen trees break bud
- After Father's Day







What can I plant in early spring?

- Overwintered perennials
- Deciduous trees and shrubs
- Evergreens
 - Rhododendrons
 - Euonymus
 - Conifers
- Cold hardy annuals





Cold Hardy Annuals

- Calendula
- Dianthus
- English Daisy
- Forget Me Not
- Clarkia
- Pansy
- Petunia

- Snapdragon
- Stock
- Sweet Alyssum
- Sweet Pea
- Viola
- Wallflower

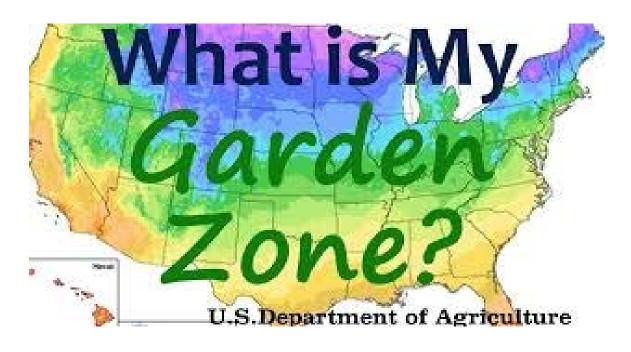


Why plant in spring?

- Cool daytime temperatures
- Plant availability
- Color pop







In Lake Tahoe our USDA zones tend to vary depending on where you are between 6b -7a and mostly in Sunset zones 2B (all of the California side) and 1A (sections of the Nevada side).



What about late season frost and snow?





Excluding Vermin - UC IPM Website Resources

http://ipm.ucanr.edu/

POCKET GOPHERS

Integrated Pest Management for Home Gardeners and Landscape Professionals

Pocket gophers, often called gophers, Thomomys species (Fig. 1), are burrowing rodents that get their name from the fur-lined, external cheek pouches, or pockets, they use for carrying food and nesting materials. Pocket gophers are well equipped for a digging, tunneling lifestyle with their powerfully built forequarters; large-clawed front paws; fine, short fur that doesn't cake in wet soils; small eyes and ears; and highly sensitive facial whiskers that assist with moving about in the dark. A gopher's lips also are unusually adapted for their lifestyle; they can close them behind their four large incisor teeth to keep dirt out of their mouths when using their teeth for digging.

IDENTIFICATION

Five species of pocket gophers are found in California, with Botta's pocket gopher, *T. bottae*, being most widespread. Depending on the species, they

One gopher can create several mounds in a day. In nonirrigated areas, mound building is most pronounced during spring or fall when the soil is moist and easy to dig. In irrigated areas such as lawns, flower beds, and gardens, digging conditions usually are optimal year round, and mounds can appear at any time. In snowy regions, gophers create burrows in the snow, resulting in long, earthen cores on the surface when the snow melts.

BIOLOGY AND BEHAVIOR

Pocket gophers live in a burrow system that can cover an area that is 200 to 2,000 square feet. The burrows are about 2 1/2 to 3 1/2 inches in diameter. Feeding burrows usually are 6 to 12 inches below ground, and the nest and food storage chamber can be as deep as 6 feet. Gophers seal the openings to the burrow system with earthen plugs. Short, sloping lateral tunnels connect the main



Figure 1. Adult pocket gopher, Thomomys species.



Figure 2. Top view of a pocket gopher mound.



Excluding Vermin

- Individual plant protection above ground
- Planting in wire baskets
- Fencing
- Traps





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Resources

Type Tahoe Friendly Gardens into your browser

- Hand out: "Tahoe Friendly Native and Adapted Plants"
- University of California Extension
- Tahoe Resource Conservation District
- Tahoe Friendly Gardens
- Xerces Society for information on planting for pollinators: bees, butterflies and birds https://xerces.org

Other resources

- Sunset Western Garden Book
- Nursery websites

What's Wrong with my Plant?

Factors:

Biotic (living)

Abiotic (nonliving)



What's Wrong with my Plant?

ABIOTIC STRESSES



- moisture
- temperature
- soil

-composition

-compaction

- air quality/wind
- -space
- temperature
- light



What's Wrong With My Plant?

BIOTIC STRESSES:

Birds, mammals, and reptiles (Vertebrate pests)

Click on the QT next to a pest name for a brief overview of how to manage a pest.

- Bats
- Birds on Tree Fruits and Vines
- Cliff Swallows
- Coyote
- Deer QT
- Deer Mouse
- Gophers | QT
- Ground Squirrel | QT
- House Mouse QT
- Lizards

- Mice
 - Deer Mouse
 - House
 - Voles (Meadow = Squirrels Mice)
- Moles
- Opossum
- Pocket Gophers
- Rabbits
- Raccoons

- Rattlesnakes
 - Rats | QT
- Skunks
 - - Ground QT
 - Tree
 - Tree Squirrels
 - Voles (Meadow Mice)
 - Wild Pigs
 - Woodpeckers





What's Wrong With My Plant?

Insects, mites, mollusks, nematodes

Choose a button or view a list of ALL INVERTEBRATE PESTS.

Ants

Household & outdoor ants, carpenter ants, fire ants

Bees & wasps

Honey bees, carpenter bees, wood wasps, yellowjackets, horntails

Caterpillars

Larvae of butterflies & moths

Household pests

Pests of homes, structures, people, & pets

Aphids, scales, & thrips

Also whiteflies, mealybugs, psyllids, and hoppers

Beetles

Leaf beetles, grubs, woodborers, weevils, pantry pests

Earwigs & grasshoppers

Also cockroaches, crickets, katydids, and stick insects

Snails & soil-dwellers

Slugs, centipedes, nematodes, pill bugs, springtails

Arachnids

Spiders, mites, ticks, & scorpions

Beneficials

Natural enemies of plant pests such as predators and parasites

Flies & mosquitoes

Fruit flies, house flies, maggots, leaf miners, gnats

True bugs

Stink bugs, plant bugs, lace bugs

What's Wrong with My Plant?

Ants - Manage around landscape and building foundations, such as using insecticide baits and trunk barriers.

<u>Aphids</u> - On small plants, spray a strong stream of water or apply insecticidal oils and soaps. Look for and conserve <u>natural enemies</u> such as predaceous bugs, lacewings, lady beetles, and syrphids.

<u>Fertilize</u> caneberries, citrus, deciduous fruit trees, palms, and heavily-flowering shrubs with slow-release product if not done in March or April.

<u>Fire safe landscape</u>: LEAN - Thin out thick vegetation and eliminate fuel ladders that allow fire to climb up trees. CLEAN: Mow grasses and trim shrubs. Remove dry, resinous or dead plants and flammable debris. Cut branches back 15 to 20 feet from buildings. Use non-combustible surfaces for walkways, patios and driveways. GREEN: Landscape using low-growing, non-woody plants.

<u>Irrigation</u> - Adjust watering schedules according to the weather and plants' changing need for water. Check systems for leaks and broken emitters and perform maintenance as needed. Consider upgrading the irrigation system to improve its water efficiency.

<u>Mosquitoes</u> - Eliminate standing water e.g., in gutters, drain pipes, and flowerpots. Place *Bacillus thuringiensis* subspecies *israelensis* in birdbaths and ponds to selectively kill mosquito larvae.

Mulch - Apply organic mulch where thin or soil is bare beneath trees and shrubs.

Powdery mildew - Check for signs of disease on apple, crape myrtle, grape, rose, and stone fruits.



GAME: What's Bugging My Plant?



What's Wrong with my Plant?

University of California Agriculture & Natural Resources

http://ipm.ucanr.edu

++ Seasonal Landscape IPM Checklist ++

A regional decision-making tool to help guide gardeners through the activities needed to implement an IPM program throughout the year.

https://www2.ipm.ucanr.edu/landscapechecklist/checklist.cfm?regionKey=1



Spring Lawn Care

Repair, boost vigor and/or remove lawn

- Aerate
- Repair damaged lawn areas-water exemption
- Apply nitrogen during growth spurt-GO ORGANIC
- Water as needed
- Sharpen mower blades
- Check mow height
- Remove non functional or difficult to maintain areas



Turf Buy Back Program



- \$1.50 per SF up to \$2000 residential, \$3000 commercial
- Revegetation requirement of 25% plant cover in 5 years
- Mulch areas in between
- Pre and post inspection required
- Completion deadline October 15, 2020 (2 summers)
- Can be repeat participant





Water Needs

When should I start watering my landscape plants?

- Establish plants early in spring to set up success
- Give new fall plantings regular water
- Hand water as needed
- Water when the top 2" of soil is dry

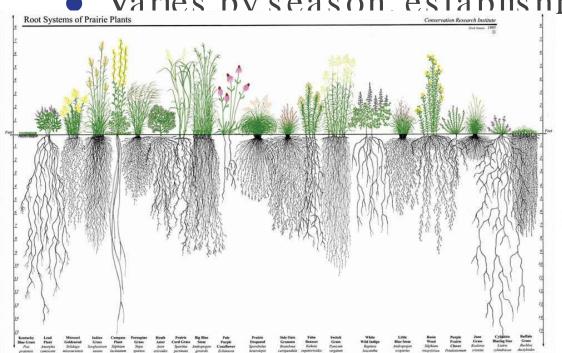


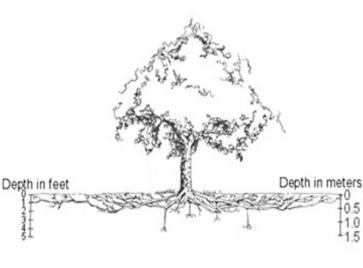
Water Needs

How much water does my landscape need?

- Frequency depends on hydrozone
- Water to root depth and width
- Cycle soak irrigate dry soil = NO RUN OFF

Varies by season establishment and maturity







Lawn Irrigation Start Up

- 1. Open the system main water valve slowly to allow pipes to fill with water gradually.
- 1. Verify the proper operation of each station valve by manually activating each zone at a time from the controller.









Lawn Irrigation Start Up

- 3. Walk through each station on the controller
 - Check for proper operation of the zone including:
 - operating pressure
 - rotation
 - adjustment of sprinkler heads
 - adequate coverage
 - Check and clean filters on poorly performing sprinklers
 - Adjust heads to grade as necessary
 - Upgrade to High Efficiency (HE) spray nozzles







- 4. Reprogram the controller for automatic springtime watering
- 5. Replace the controller back-up battery if necessary
- 6. Uncover and clean the system weather sensors





Irrigation Start Up Drip Irrigation

- 1. Repeat steps 1 and 2
- 2. Walk through each station on the controller
 - Check for proper operation of the zone including:
 - operating pressure
 - rotation and adjustment of spray emitters
 - placement of drip emitters
 - adequate coverage
 - Check, clean or replace poorly performing emitters
 - Repair and leaks in the line
 - Adapt or expand layout to meet current landscape needs
- 3. Repeat steps 4, 5 and 6

Irrigation Rebate Program



- \$400 rebate when upgrading to improve water efficiency of existing irrigation system
- 50% materials, 25% of labor
- Receipts, pre and post inspection, equipment approval required







WaterSmart



WaterSmart helps you track your home's water use and savings with an easy-to-use web and mobile portal.



Water Wise Landscape Consultation

South Tahoe Public Utility District customers can request a free Landscape Consultation to help troubleshoot irrigation efficiency problems, make suggestion for improvement and help you learn about sustainable landscaping techniques, water wise design, and plant choices that will help you garden the Tahoe friendly way.

Friendly

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Spring Pruning

Purpose

Health

Function

Defensible space

Esthetics



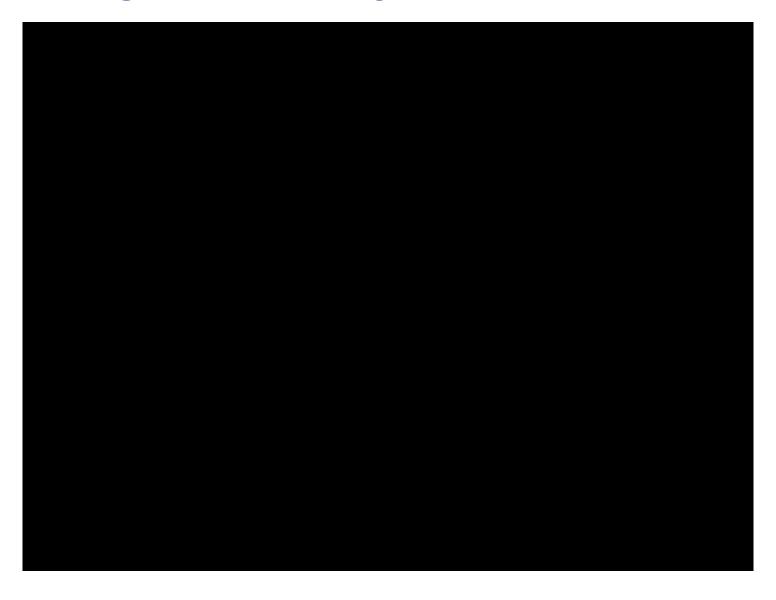




Pruning Video -- Pruning Ornamental Trees



Pruning Video--*Pruning Multi-Stem Shrubs*





Pruning

Candle pruning evergreens









Improve Your Soil Quality

MULCH



On top
Organic & inorganic
A lid on the soil
Stabilizes temperature
Design element

COMPOST



Mixed in
Organic
Supports healthy soil
Sponges up water
Fosters air flow

Mulch

Organic



Cheap/free

Degrades (improves soil)

Combustible

May support disease

Inorganic



Must be purchased Permanent

Defensible

Heat-holding

Compost

Homemade:



Food:

1 part Carbon/energy

1 part

Nitrogen/protein

Water

Purchased:





Next Gardening
Through the
Season
Workshop

Saturday, June 29, 1-3 pm

Other upcoming opportunities...

- Farmers Markets (Tuesdays at American Legion)
- Growing Food in Tahoe Workshops
- Master Gardener Plant Sale





Growing Food in Tahoe Workshop Series

South Lake Tahoe Library, 1000 Rufus Allen Blvd., SLT

All workshops 6 - 8 pm

Tuesday, May 21st: Potatoes Tuesday, May 28th: Lettuce & Kale Tuesday, June 4th—Tomatoes

For a small donation join our study and get plants for your home garden! Just let us know how your plants are growing.









SATURDAY JUNE 22, 2019

12 - 2 PM

UCCE Master Gardener Plant Sale

Cowork Tahoe Parking Lot, 3079 Harrison Ave., SLT Large Selection of Native & Adapted Plants





Stay in touch

South Tahoe Public Utility District

530-543-6268

jcressy@stpud.us



UCCE Master
Gardeners of Lake
Tahoe

530-314-8383

laketahoemg@ucanr.ed

