

Fight the Lawn & Win

(Turf Removal & Site Preparation)

What are the potential benefits?



- Water Conservation
- Time & Money Savings
- Environmental Concerns
- Habitat Improvement

How do I remove turf?

- Solarization
- Sheet Composting
- Physical Removal
- Herbicides



Solarization



Cover grass with black plastic until it dies (usually takes 1 to 2 months), remove the plastic, and leave the dead grass to compost in place

Benefits: easy, inexpensive, & minimal environmental impact

Downside: kills insects & other soil organisms, can be unsightly, plastic is not biodegradable

Sheet Composting



Mow the lawn low, cover with cardboard (be sure to overlap), wet down, add a layer of compost, add 4" of mulch

Benefits: organic addition, minimal labor, no disposal/removal of turf, environmentally friendly

Downside: may require lots of cardboard, takes a longer time, impractical on slopes

Physical Removal



Rent or borrow a sod cutter, roll up the strips, remove turf, cover soil with newspaper, add 4" compost and 3" mulch

Benefits: quick, creates good soil, prevents grass re-growth

Downside: won't work for Bermuda grass, labor intensive, removes organic matter

Herbicides

Choose an appropriate product & carefully follow the directions on the label (make sure it is only for grasses & not broad-leaf plants)

Benefits: can be simple & quick for people familiar with herbicide use

Downside: risks injuring or killing nearby plants, can harm beneficial insects, can cause personal injury, runoff pollution

The Lawn's Gone - What do I do now?



- Replace lawn with native sedges or bunch grasses
- Replace lawn with native meadow (wildflowers, grasses and native shrubs)
- Replace lawn with 1/2 grasses, 1/2 native meadow
- Replace lawn with new landscape using water-wise plants and grasses and mulch

Sources:

Taylor Lewis - UC Davis Arboretum (<http://arboretum.ucdavis.edu>)

Sonoma County Master Gardeners - Grass Removal Methods (ucanr.edu/sites/scmg/Lawn_Replacement)



YEARLY (native

plant) CHECKLIST

WINTER DEC 21-MAR 21

Plant!!!- Best time of the year to plant

- Nursery stock or your own
- Late flowering bulbs
- Seeds of spring annuals

normal plant losses about 5%

Take hardwood cuttings before Jan
Divide perennials/ transplant season
Cut old herbaceous and perennials

- flower stalks
- fern fronds
- clean out and cut back

Jan-Feb is a great time to get a head start on weeds

- wet soil
- small roots

?Do you need more mulch?

SUMMER JUNE 21-SEP 21

You can still plant

- onesies
- more water tolerant species
- grasses are ok
- water when they wilt
- easy to monitor water regime
- avoid very drought tolerant

normal losses about 13%

Much fewer weeds now

- spurge is worst, dig deep

Clean out spring annuals leftovers

Avoid heavy pruning until SEP

- light trim on many OK
- remove dead growth

If you have to water, need to water, love to water, think they need more water...

Spray the dust off

?Does your plant go dormant in summer no matter what?

SPRING MAR21-JUNE 21

You can still plant

Water the area to be planted well one week prior
Check soil wetness & water weeklyish thereafter

Normal losses about 8%

Continue weed vigil

Check new plantings weekly

Water new ones 2x per month

Watch old plants for water needs

Map your plants

- which color/plant where
- when do they bloom
- what is doing great
- need more?
- what is not
- are there enough (just small)

?Do you think there is anything missing?

FALL SEP 21-DEC 21

Great time to plant

Normal losses about 10%

Don't stop watering new plants (but you can likely water much less now)

- young roots not ready

Especially important not to over-water

If the plant is doing well and not wilting don't water it

It's time to relax and enjoy the fuchsia and buckwheat.

Start doing research for new plants

Shop and talk to nursery folk

This is an excellent hiking season (its okay to steal ideas from mother nature)

Appreciate the yellows, browns, and greens. Everything in its own season

?Do falling leaves let in more light?

Easy Meadow Plants

KEY:

C=	Cool Season Grass
W=	Warm Season Grass
S=	Spreading Grass
P=	Clumping Grass
D=	Dry Shade Tolerant
Fo=	Foliage Interest
Fl=	Attractive Flowers
L=	Lawn Alternates
H=	Wet Spot/Heavy Clay
G=	Groundcover Grass
I=	Tolerates Interior Conditions

YOUR GUIDE TO GREAT MEADOW GRASSES

Small 6-18 inches	Medium 1-3 feet	Large 3 feet +
Agrostis pallens C, S, G, Fo, L	Aristida purpurea C, P, Fl, G, I	Calamagrostis nutkaensis W, P, Fo, H, I
Bouteloua gracilis W, P, Fo, Fl, L*, G, I	Calamagrostis foliosa W, P, Fo, Fl, G, I	Leymus condensatus C, P, D, Fo, G, I
Carex pansa W, S, L, G, I	Carex praegracilis W, S, L, H, G, I	Muhlenbergia rigens W, P, Fo, Fl, I
Distichlis spicata W, S, Fo, L, H, G, I	Deschampsia cespitosa C/W, P, Fl, G, I	
Festuca idahoensis C, P, Fo, L, G, I	Festuca californica C, P, D, Fo, Fl, I	
Festuca rubra C, S, D, L, G, I	Juncus patens P, Fo, H, I	
Carex divulsa W, P, Fo, L, G, I	Koeleria macrantha C, P, Fl, L, G, I	
	Leymus triticoides C, S*, Fo, H, G, I	
	Nasella cernua C, P*, Fl, G, I	
	Nasella lepida C, P*, Fl, G, I	
	Nasella pulchra C, P*, Fl, G, I	

Small 0-1'

Daisy, Erigeron glaucus karvinskianus
Ca fuchsia, Epilobium latifolium
Sage, Salvia spathacea
Blue Eyed Grass, Sisyrinchium
Poppies, Eschscholzia cal
Buttercup, Ranunculus cal
Blue Flax, Linum lewisii
Dudleya
Echeveria
Sedum

Tall 3' +

Sage, Salvia hybrids
Matilija poppy, Romneya coulteri
Rose, Rosa californica
California Lilac, Ceanothus
Manzanita, Arctostaphylos sp

Medium 1-3'

Aster chilensis
Yarrow, Achillea millefolium
Penstemon heterophyllus
Fuchsia, Epilobium canum
Monkey flower, Mimulus sp
Sage, Salvia cleveandii, greggii, apiana, brandegei, leucophylla, mellifera,
Iris douglasii, PCH Hybrids
Columbine, Aquilegia formosa
Lupine, Lupinus polyphyllus, formosus, albifrons, arboreus,
Buckwheat, Eriogonum sp many
Catmint, Nepeta x faassenii
Oregano, Origanum
Germander, Teucrium chamaedrys

Plants for Heavy Soils

<u>Groundcovers</u>		<u>Shrubs</u>	
<i>Achillea millefolium</i>	Yarrow	<i>Arctostaphylos 'Howard McMinn'</i>	Manzanita
<i>Baccharis pilularis 'Dwarf forms'</i>	Prostrate Coyote Brush	<i>Artemisia californica</i>	Sagebrush
<i>Ceanothus griseus</i>	California Lilac	<i>Atriplex</i>	Salt Bush
<i>Ceanothus m. 'Valley Violet'</i>	Valley Violet Ceanothus	<i>Baccharis pilularis</i>	Coyote Brush
		<i>Berberis aquifolium</i>	Oregon Grape
		<i>Calycanthus occidentalis</i>	Spicebush
<u>Grasses</u>		<i>Carpenteria californica</i>	Bush Anemone
<i>Bouteloua spp</i>	Eyelash grass	<i>Ceanothus 'Concha'</i>	Concha Ceanothus
<i>Elymus</i>	Wild Rye	<i>Cercocarpus betuloides</i>	Mountain Mahogany
<i>Festuca</i>	Fescue	<i>Encelia californica</i>	Bush Sunflower
<i>Muhlenbergia</i>	Muhly Grass	<i>Eriogonum fasciculatum</i>	California buckwheat
		<i>Eriogonum giganteum</i>	Giant Buckwheat
<i>Juncus</i>	Wire Grass	<i>Galvezia speciosa</i>	Bush Island Snapdragon
		<i>Lonicera involucrata</i>	Twinberry
<i>Carex</i>	Sedge	<i>Myrica californica</i>	Pacific Wax Myrtle
		<i>Rhamnus californica</i>	Coffeeberry
<u>Perennials</u>		<i>Ribes aureum</i>	Golden Currant
<i>Clinopodium douglasii</i>	Yerba Buena	<i>Rosa californica</i>	Rose
<i>Epilobium canum</i>	California fuchsia	<i>Salvia spp</i>	Sage
<i>Erigeron glaucus</i>	Seaside Daisy		
<i>Eschscholzia californica</i>	California Poppy		
<i>Heuchera spp</i>	Coral Bells		
<i>Iris</i>	Iris		
<i>Monardella</i>	Coyote Mint		
<i>Penstemon heterophyllus</i>	Penstemon		
<i>Ribes viburnifolium</i>	Evergreen Currant		
<i>Salvia spathacea</i>	Sage		
<i>Sisyrinchium bellum</i>	Blue Eyed Grass		
<i>Solidago californica 'Cascade Creek'</i>	California golden rod		
<i>Woodwardia fimbriata</i>	Giant Chain fern		
		<u>Trees</u>	
		<i>Acer macrophyllum</i>	Maple
		<i>Alnus rhombifolia</i>	Alder
		<i>Cercis occidentalis</i>	Redbud
		<i>Chilopsis linearis</i>	Desert Willow
		<i>Prunus lyonii</i>	Holly Leaf Cherry
		<i>Quercus ag, chr, lob</i>	Oaks
		<i>Sambucus mexicana</i>	Elderberry

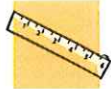
Watering Your Lawn - Step 1

Measure sprinkler output



Place five or more flat-bottomed containers (coffee mugs, tin cans, cake pans, etc.) randomly around your lawn. Keep them at least 2 feet away from the sprinkler heads.

Run your system for 15 minutes.



Turn off the system and use a ruler to measure the depth of water in each can or mug.

Use the chart on reverse as a guideline on how many minutes a week to water your lawn.

Always remember to water with the weather!



Mar. 15-May 14



May 15-Sept. 14



Sept. 15-Nov. 14



Nov. 15-Mar. 14

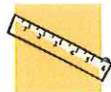
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Mar. 15-May 14



May 15-Sept. 14



Sept. 15-Nov. 14



Nov. 15-Mar. 14

Watering Your Lawn - Step 2

Determine how long to water your lawn

Average depth in cans (in inches after 15 minutes)	Total recommended minutes of watering per day using a 3 times a week irrigation schedule.			
	Spring (Mar.15-May 14)	Summer (May 15 -Sept. 14)	Fall (Sept. 15-Nov. 14)	Winter (Nov. 15- Mar.14) Little or no watering is usually re- quired
1"	4	7	5	
3/4"	5	9	6	
5/8"	6	11	7	
1/2"	8	14	9	
3/8"	11	18	12	
1/4"	16	28	18	
1/8"	32	56	36	

This chart is only a general guide. For more detailed watering information, please refer to the UC Davis Integrated Pest Management website's online irrigation calculator (<http://www.ipm.ucdavis.edu/TOOLS/TURF/MAINTAIN/irrsched.html>).

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Web Links for further information (3/2015)

NATIVE and/or WATER-WISE PLANTS

- Some Water Efficient Landscape Plants for Yolo County: <http://ceyolo.ucdavis.edu/files/53338.pdf>
- Recommended Water-Efficient Vines for Yolo County: <http://ceyolo.ucdavis.edu/files/53033.pdf>
- Yolo Master Gardeners newsletter: Water-Wise Gardening-Incorporating Native Plants into Your Landscape: http://ceyolo.ucdavis.edu/newsletters/The_Yolo_Gardener41472.pdf
- Arboretum All-Stars: http://arboretum.ucdavis.edu/arboretum_all_stars.aspx
- Sunset Plant Finder: <http://plantfinder.sunset.com/plant-home.jsp>

LANDSCAPE DESIGN

- Eco-Friendly Landscape Designs for The New California Landscape: <http://www.ecolandscapes.org/new-ca> "Right As Rain," "Neat & Petite," "Wholesome Habitat," "Recreation Destination." All technical drawings, plant profiles and design details completed.
- Arboretum Pre-designed Garden Plans:
 - Wildlife attracting: <http://arboretum.ucdavis.edu/downloads/wildlifeplan.pdf>
 - Low-Maintenance: <http://arboretum.ucdavis.edu/downloads/lowmaintplan.pdf>
 - California Natives: <http://arboretum.ucdavis.edu/downloads/canativeplan.pdf>
- Sunset: Plant a dazzling low-water bed: <http://www.sunset.com/garden/landscaping-design/plant-dazzling-low-water-bed>

TOURS AND EVENTS

- City of Woodland Water Wise Landscape Tour; Meet at Woodland Community Center 8:30 am for special presentations until 10:00. Get booklet for yard tours from 10:30 – 1:30. <http://www.cityofwoodland.org/gov/depts/pw/areas/enviro/water/landscape.asp> Tour blog at <http://wwwdlandwaterwiselandscapetour.blogspot.com/>
- Bringing Back the Natives – Garden Tour (Bay Area), May 3rd, 2015: <http://www.bringingbackthenatives.net/>
- Gardens Gone Native Tour (CNPS), April 11th, 2015. http://sacvalleycnps.org/index.php?option=com_content&view=article&id=23&Itemid=134
- Woodland Community College/Master Gardeners Annual Plant Sales: April 4th 9:00 – 1:00 pm; and April 11th, 18th 25th and May 2nd from 9:00 – 12:00.

NATIVE PLANT SALES

- UC Davis Arboretum, 2015 Plant Sale dates and information: http://www.arboretum.ucdavis.edu/plant_sales_and_nursery.aspx
- More Sales: <http://www.cnps.org/cnps/horticulture/calendar/index.php?c=&t=Garden+Tour>
- Woodland Community College/Master Gardeners Annual Plant Sales: April 4th 9:00 – 1:00 pm; and April 11th, 18th 25th and May 2nd from 9:00 – 12:00.
- CNPS (California Native Plant Society) Annual Spring Native Plant Sale

GENERAL INFORMATION FOR GARDENERS

- Yolo County Master Gardeners Free Garden Publications: <http://ucanr.edu/sites/YCMG/MoreInfo/>
- Master Gardeners Garden Links: <http://ucanr.edu/sites/YCMG/GLinks/>

EDIBLE LANDSCAPING

- UC California Garden Web: <http://cagardenweb.ucanr.edu/Vegetables/>
- Yolo County Vegetable Planting Guide: <http://ceyolo.ucdavis.edu/files/53274.pdf>

GENERAL WATER-SAVING INFORMATION

- City of Woodland Environmental Services, Landscape Tour, Planting Plans and more: <http://www.cityofwoodland.org/gov/depts/pw/areas/enviro/water/landscape.asp>

PEST MANAGEMENT

- UC IPM Pest Guide: <http://www.ipm.ucdavis.edu/index.html>
- Home Garden, Turf & Landscape Pests: <http://www.ipm.ucdavis.edu/PMG/menu.homegarden.html>
- Pest Notes Library: <http://www.ipm.ucdavis.edu/PDF/PESTNOTES/index.html>

Water Conservation Links

- Department of Water Resources (<http://www.water.ca.gov>).
- EcoLandscape California (<http://www.ecolandscape.org/index.html>).
- EPA's WaterSense Program (www.epa.gov/watersense).
- Green Gardeners Trained Professionals List (<http://www.bewatersmart.info/water-smart-gardening/green-gardener/>)
- Home Water Usage Calculator (<http://www.home-water-works.org/calculator>)
- Irrigation Association (<http://www.irrigation.org/>)
- Landscape Contractors Association (<http://www.winwithlca.org/>)
- Lawn Watering Guide (<http://anrcatalog.ucdavis.edu/pdf/8044.pdf>)
- Regional Water Authority Rules of Thumb for Water-Wise Gardening (<http://www.rwah2o.org/rwa/files/ToolKit/For%20the%20Garden/Rules%20of%20Thumb%20for%20Water%20Wise%20Gardening.pdf>)
- Sprinkler Times (<http://www.sprinklertimes.com/>)
- State of California "Save Our Water" campaign (www.saveourh2o.org).
- UC Davis Arboretum (arboretum.ucdavis.edu/valleywise_gardening.aspx).
- Yolo County Master Gardeners (http://ceyolo.ucdavis.edu/Gardening_and_Master_Gardening/)
- Yolo County Resource Conservation District (<http://www.yolorcd.org/>)

