

TABLE 1.
LAWN WATERING GUIDE — SOUTHERN CALIFORNIA

ZONE 1 - COASTAL BELT

WARM-SEASON GRASS

	Minutes to water each week			
	0.5 in	1.0 in	1.5 in	2.0 in
If hourly sprinkler output is:				
JAN	44	22	15	11
FEB	57	28	19	14
MAR	63	32	21	16
APR	76	38	25	19
MAY	88	44	29	22
JUN	95	47	32	24
JUL	107	54	36	27
AUG	95	47	32	24
SEP	82	41	27	20
OCT	69	35	23	17
NOV	50	25	17	13
DEC	38	19	13	9

COOL-SEASON GRASS

	Minutes to water each week			
	0.5 in	1.0 in	1.5 in	2.0 in
If hourly sprinkler output is:				
JAN	59	29	20	15
FEB	76	38	25	19
MAR	84	42	28	21
APR	101	50	34	25
MAY	118	59	39	29
JUN	126	63	42	32
JUL	143	71	48	36
AUG	126	63	42	32
SEP	109	55	36	27
OCT	92	46	31	23
NOV	67	34	22	17
DEC	50	25	17	13

ZONE 2 - INLAND VALLEYS

WARM-SEASON GRASS

	Minutes to water each week			
	0.5 in	1.0 in	1.5 in	2.0 in
If hourly sprinkler output is:				
JAN	42	21	14	10
FEB	57	28	19	14
MAR	80	40	27	20
APR	96	48	32	24
MAY	119	60	40	29
JUN	144	72	48	36
JUL	165	83	55	41
AUG	155	77	52	39
SEP	124	62	41	31
OCT	88	44	29	22
NOV	54	27	16	14
DEC	42	21	14	10

ZONE 2 - Continued

COOL-SEASON GRASS

	Minutes to water each week			
	0.5 in	1.0 in	1.5 in	2.0 in
If hourly sprinkler output is:				
JAN	56	28	19	14
FEB	75	38	25	19
MAR	106	53	35	27
APR	128	64	43	32
MAY	159	80	53	40
JUN	193	86	64	48
JUL	221	110	74	55
AUG	207	103	69	52
SEP	165	82	55	42
OCT	117	59	39	29
NOV	73	36	24	18
DEC	55	28	19	14

ZONE 3 - DESERTS

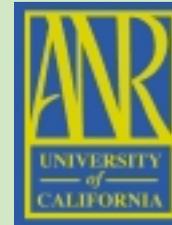
WARM-SEASON GRASS

	Minutes to water each week			
	0.5 in	1.0 in	1.5 in	2.0 in
If hourly sprinkler output is:				
JAN	54	27	18	14
FEB	75	38	25	19
MAR	121	61	40	30
APR	165	83	55	41
MAY	211	106	70	53
JUN	243	121	81	61
JUL	251	126	84	63
AUG	218	109	73	54
SEP	180	90	60	45
OCT	121	61	40	30
NOV	69	35	23	17
DEC	43	22	14	11

COOL-SEASON GRASS

	Minutes to water each week			
	0.5 in	1.0 in	1.5 in	2.0 in
If hourly sprinkler output is:				
JAN	65	32	22	17
FEB	90	46	30	23
MAR	145	73	48	36
APR	198	100	66	49
MAY	253	127	84	64
JUN	292	145	97	73
JUL	301	151	101	76
AUG	262	131	88	65
SEP	216	108	72	54
OCT	145	73	48	36
NOV	83	42	28	20
DEC	52	26	17	13

GARDEN INFORMATION SERIES



The University of California prohibits discrimination against or harassment of any person on the basis of race, color, national origin, religion, sex, physical or mental disability, medical condition (cancer-related or genetic characteristics), ancestry, marital status, age, sexual orientation, citizenship, or status as a covered veteran (special disabled veteran, Vietnam-era veteran or any other veteran who served on active duty during a war or in a campaign or expedition for which a campaign badge has been authorized).

University Policy is intended to be consistent with the provisions of applicable State and Federal laws.

Inquiries regarding the University's nondiscrimination policies may be directed to the Affirmative Action/Staff Personnel Services Director, University of California, Agriculture and Natural Resources, 1111 Franklin, 6th Floor, Oakland, CA 94607-5200 (510) 987-0096

University of California

Cooperative Extension



LAWN WATERING GUIDE



LAWN WATERING GUIDE

Maintaining an attractive and healthy lawn requires less water than you might think, especially if you apply the right amount of water at the right time as evenly as possible. Follow these simple steps to a healthier, more attractive, and water-efficient lawn.

1. DETERMINE WHAT TYPE OF LAWN YOU HAVE.

Determine if your lawn is composed of a warm-season or cool-season grass.

Warm-season grass: Bermudagrass, Zoysia, St. Augustine grass.

Cool-season grass: Tall Fescue, Kentucky Bluegrass, Perennial Ryegrass.

2. DETERMINE THE AMOUNT OF WATER YOUR SPRINKLERS APPLY AND HOW EVENLY THEY APPLY IT.

Set six or more straight-sided, flat-bottomed cans (tuna or cat food cans work well) evenly spaced about every six feet or so on your lawn. Run the sprinklers for 20 minutes and, using a ruler, measure the depth of water in inches in each can. Add up the depth of water in all cans and divide by the number of cans to determine the average depth.

Multiply the average depth by three to determine how much water your sprinklers applied in inches per hour.

If more than a 15 to 20 percent difference exists among the depths of water in individual cans, there are probably some significant problems with the sprinkler system that need to be corrected to improve the evenness of the water application. See the Garden Information Series brochure *How to Save Water in Your Garden and Landscape* for a list of sprinkler system problems and possible solutions.

3. DETERMINE HOW LONG TO WATER YOUR LAWN EACH WEEK.

Use Table 1 to determine the total number of minutes to water your lawn each week based on the time of year, your location, your type of lawn, and how much water your sprinkler applies in inches per hour. The amounts of time to water listed in Table 1 are based on average weather conditions over a 30-year period. You may have to adjust the watering time slightly to compensate for current weather conditions.

4. WHEN AND HOW TO WATER.

Now you know how many minutes to water each week. When and how to water largely depends on the type of soil you

have. Heavy, very fine-textured soils, like clay, hold more water so they can go for a longer period of time between waterings. On the other hand, light, very coarse-textured soils, like those with a large quantity of sand, hold less water so they can go only short periods of time between waterings. While the total minutes you run your sprinklers each week remains the same for either type of soil, the manner in which it is applied will vary.

For example, if you determined you must water for 60 minutes each week, you may only have to water one time a week if you have a clay soil. Conversely, if you had a sandy soil, it would probably be best to break up that 60 minutes into three 20-minute waterings evenly spaced throughout the week.

Avoiding Run-Off and Waste

Most sprinkler systems apply water much too fast, faster than the lawn and soil can absorb it, especially if your lawn is on a slope, the soil is compacted, and/or the soil is heavy, like clay. Too much water at one time is wasteful, and can lead to an unhealthy lawn and adjacent plants since most of the water will run off down the driveway or puddle in low areas. In such cases, you will probably have to split the

amount of watering time each day you water into several short cycles as described below.

Turn on your sprinkler system at the same time you normally water and record the amount of time it takes before water begins to run off. Divide the total number of minutes you should water that day by the number of minutes it took for run off to occur. This amount will determine how many cycles you need to water.

For example, if you must water for 20 minutes on a particular day and water runs off after five minutes, you should water four times that day of five-minute cycles each ($20 \div 5 = 4$). Wait 10 to 15 minutes after a five-minute cycle before beginning the next cycle so that the water has a chance to penetrate into the soil.

How to Water Your Lawn with a Hose-End Sprinkler

If you do not have a sprinkler system, you are not alone. In fact, many Californians use hose-end sprinklers to water their lawns and yards. You can still save water and have an attractive, healthy lawn without installing an expensive sprinkler system by following the same Steps 1-4 described above with only a few changes in Step 2.

For Step 2, turn the faucet on to the same level at which you would normally water to

determine the sprinkler spray pattern on the lawn. Evenly space the water catch cans throughout the spray pattern. Run the sprinkler for 20 minutes as described in Step 2 to determine the amount of water the sprinkler applies in inches per hour. Now continue with Steps 3 and 4.

Here are some tips to improve coverage and save water when using a hose-end sprinkler:

- When moving the sprinkler around the lawn, each new position should be at the perimeter of the spray pattern of the previous spot. Such positioning ensures adequate sprinkler overlap, thus improving coverage.
- Use several sprinkler positions, each with a smaller spray pattern, rather than one position with one large spray pattern.
- Move the sprinkler to several locations to prevent dry areas if trees or other plants block the spray pattern. Avoid wetting tree trunks.
- Avoid watering sidewalks, driveway, or the house.
- Try to maintain the same pressure and flow during each watering to keep sprinkler output as consistent as possible. One way is to keep a record of how many turns of the faucet

gave the preferred volume. Keep track of the total watering time with an inexpensive household timer.

• Check for leaks between the faucet, hose, and sprinkler. A new rubber washer is inexpensive and easy to install.

See *How to Save Water in Your Garden and Landscape* of the Garden Information Series for additional water-saving tips.

Ask your nursery or garden center professional for additional information and assistance about watering your lawn.

The authors are Janet S. Hartin, Environmental Horticulture Advisor, University of California Cooperative Extension, San Bernardino, and Donald R. Hodel, Environmental Horticulturist, University of California Cooperative Extension, Los Angeles.