

M. Richards



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GARDENER'S REFERENCE

One striking and important feature of Filoli's gardens is the lush swaths of lawn that provide an emerald green foil for the geometric shapes and patterns of Filoli's English design and its colorful flowers. In winter especially, turf adds color and life to an otherwise dormant landscape of bare beds and branches. Lawns at Filoli receive attention on multiple levels; they are monitored for moisture, mowed and edged weekly as weather and soil moisture permit, fertilized in the spring and fall, 'rejuvenated' annually with fertilizer and overseeding if necessary, and 'renovated' if a significant portion of the lawn is composed of weedy species and/or bald patches.

TURF

In keeping with Filoli's vision of preservation, gardeners are as precise as possible with both irrigation and fertilizer applications to minimize runoff of excess nutrients that would damage nearby creeks and natural areas. Lawns are not treated with pre-emergent herbicides. Instead, the turfgrass is managed to out-compete weed species and to promote the turf species best suited to Filoli's different microclimates. In hot, dry, sunny areas, Bermuda grass prevails; whereas colonial bentgrass, Kentucky bluegrass, and perennial rye prevail in cool, moist sunny situations; and creeping red fescue dominates in shady, dry locations. Filoli uses traditional, fine-textured grasses for its turf mix and allows English daisy and clover to colonize freely. The coarser, modern turf-type tall fescues typically used for high traffic situations are not acceptable for Filoli's traditional English greensward.

Watering

All of Filoli's lawns are kept on irrigation timers that are monitored and adjusted throughout the year. Generally, these are turned off during the rainy season, run manually as the weather grows warmer and dryer, and kept on regular programs through the long daylight hours of our hot summers and early fall.

Watering schedules vary throughout the garden, depending on plant selection, exposure, drainage, sprinkler type, and sprinkler precipitation rate. In the height of summer, turf is typically watered in several brief cycles two days per week. Although the garden irrigation is automated, it is up to a vigilant gardener to be aware of the effects of day length and weather on any given turf area, and to monitor soil moisture content using a soil probe.

Fertilizing

Filoli's lawns are fertilized at least two times per year: in the spring, when they begin to put on the most growth, and in the fall, to encourage healthy root systems. Proper fertilization is one of the best defenses against invading dicot weeds, because it favors the growth of turf.

A typical application rate is one pound of actual Nitrogen per 1,000 square feet of lawn. Filoli's lawn fertilizer of choice has an analysis of 21-6-12 [Nitrogen (N) –

Because conditions vary dramatically over Filoli's various lawn areas, gardeners apply different seed mixtures formulated to tolerate and flourish in different conditions. These seeds are:

- Kentucky Blue Grass
- Perennial Rye for overseeding
- Creeping Red Fescue for shade

DEC	
NOV	
OCT	FALL PROGRAM
SEP	
AUG	
JUL	
JUN	
MAY	FERTILIZE
APR	
MAR	
FEB	
JAN	

Phosphorous (P) – Potassium (K)]; a so-called ‘complete’ fertilizer which, in addition to immediately-available Nitrogen and other nutrients and minerals, is formulated to release a supply of N over a period of time. In the spring, this fertilizer is applied every four to six weeks, or as the gardeners deem necessary by visual monitoring. Fertilizer is withheld during hot summer months, to help prevent disease.

Mowing

New turf areas do not get mowed until leaf blades are at least two inches high, and the surface must be dry, to avoid creating divots or scars with the mower. We never remove more than 1/3 of the grass height at any one mowing. For general maintenance, established lawns are mowed on a weekly schedule throughout the year except when soil conditions are soggy.

Fall Turf Program

The most intensive portion of turf maintenance takes place in the fall. At a minimum, they are aerated and fertilized to promote root growth, often in combination with overseeding, to repair the density of the turf. Overseeding with perennial rye is particularly useful to compensate for patches of Bermuda grass, which would otherwise leave brown patches when it is dormant from winter to late spring.

Although the lawns receive careful attention year-round—with minimal foot traffic and occasional spot weeding—there comes a time when weedy growth overruns the lawn and bald patches begin to detract from a lawn’s appearance. At this stage, Filoli gardeners rejuvenate their lawns in a 10-step process:

- 1) Inspect and repair irrigation as necessary. Flag head locations clearly.
- 2) Dig or spray out weeds.
- 3) In several increments, mow lawns to 1/2-3/4” high.
- 4) De-thatch, using a verticutter, to improve

- aeration and water percolation at the soil surface. Rake off excess thatch.
- 5) Aerate soil with aerator.
- 6) Apply lime (oyster shell or dolomite) if soils tend to be acidic. Send in a soil test to get the recommended application rate for your situation.
- 7) Break up dry aeration plugs with the verticutter. Remove or break up clods and other remaining debris, then grade soil with a rake.
- 8) Apply fertilizer as indicated by a soil test or a complete fertilizer to encourage strong root and shoot development.
- 9) Apply seed using a drop spreader to ensure an even application. Apply half the seed on the first pass, and the second half in a pass perpendicular to the first.
- 10) Keep the soil moist by irrigating frequently and for short periods until seeds have germinated. Do not soak the soil, as this may wash away the seed.

Lead horticulturalist Keith Park tackles the front lawns using the Walker mower



References & Further Reading:

Feldman, F. (ed.). Sunset Books. (1989). *Lawns and Groundcovers*. Menlo Park, Ca: Lane Publishing co.

MacCaskey, M. (1979). *All About Lawns*. San Francisco: Ortho Books.

Madison, J. H. (1971). *Practical Turfgrass Management*. New York: Van Nostrand Reinhold Company.

Filoli Gardener’s Reference sheets are created by garden staff to answer common questions regarding Filoli’s traditional horticultural practices. This sheet may be accessed from the Filoli website.
FILOLI CENTER, 86 CAÑADA ROAD, WOODSIDE, CA 94062
(650) 364-8300 WWW.FILOLI.ORG