

M. Richards



PLANTING THE PARTERRES

FILOLI GARDENER'S REFERENCE

At the turn of the 19th century, many formal American estate gardens like Filoli drew on the earlier English and European tradition of flower gardening in parterres—formal, geometric beds lined in boxwood or other low hedges. From when the garden opens in February to its closing in October, Filoli gardeners are hard at work to keep the parterres bursting with sheets of color, accentuating the geometric shapes and architectural forms of the house and garden. To do so, the parterres are re-planted twice a year: once from October to early December and again in May through June. Many visitors have questions about the preparation that goes into each season's show, in a never-ending chain of planning, record keeping, seed collecting, sowing, growing, bed preparation, planting, maintenance, analysis and removal.

Planting Seasonal Beds

What follows is a basic outline of Filoli's planting procedures for seasonal flower beds. Application rates for different fertilizers and amendments vary even within Filoli and are modified as needed based on periodic soil tests.

Soil Preparation and Planting:

- 1) Rotortill or fork soil, removing clods, stones, weeds and other debris.
- 2) Add 2-3 inches of compost and rake smooth.
- 3) Spread lime if needed, to adjust soil pH to between 6-6.5. Filoli has acid soil and uses 2 lbs per 100 square feet. Fork and rake smooth.
- 4) Spread fertilizers. Filoli uses 1 lb of actual nitrogen per 1,000 square feet, with half derived from slow release *Nitroform* (38-0-0) and half from fast-acting Calcium Nitrate (15.5-0-0). In practice, these rates break down to 0.5 lb Calcium Nitrate and 1 lb slow release *Nitroform* per 100 square feet. Chop in and smooth with a rake.
- 5) Measure and mark ends of rows using bamboo stakes (see fig. 1), to ensure uniform row spacing. At Filoli, spacing is typically 8 inches on center for bulbs and 8-10 inches on center for bedding.
- 6) Run stringline between first set of stakes. Standing on planting boards to avoid

Tools for Bed Preparation:

Spading fork or rototiller
Level headed rake
Scale, gloves and dust mask for applying lime and fertilizers

Amendment and Fertilizer:

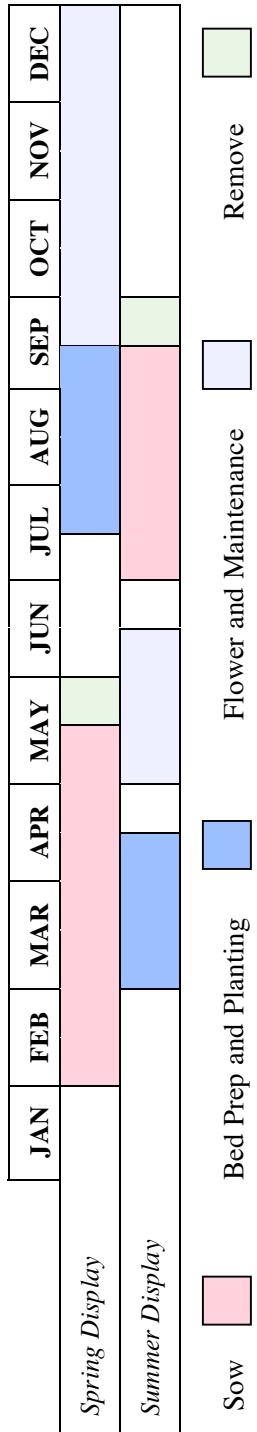
Filoli's homemade compost
Oystershell/dolomite lime
Nitroform 38-0-0
Calcium Nitrate 15.5-0-0

compaction, dig holes and plant along length of stringline. Use a yardstick for accurate spacing.

NOTE: Before planting, bedding plants are always watered thoroughly, and root-balls are gently teased loose. These steps ensure that the potting mix absorbs water once in the ground and that growing roots come in contact with the native soil—both of which encourage vigorous root growth and fast establishment. In the fall, bulbs are planted first and the bedding plants are planted over the top of them. The bulbs find their way up and around the bedding plants, but dig holes carefully to avoid damaging the bulbs. Planting bulbs point up helps ensure uniform height and bloom times.

- 7) After each row, move planting boards and stringline backwards.

Planting Tools:	Bedding / Bulbs
Planting boards	Trowel / Bulb Planter
Bamboo stakes	Level Headed Rake
String line	Hose
Yard stick	Water Wand

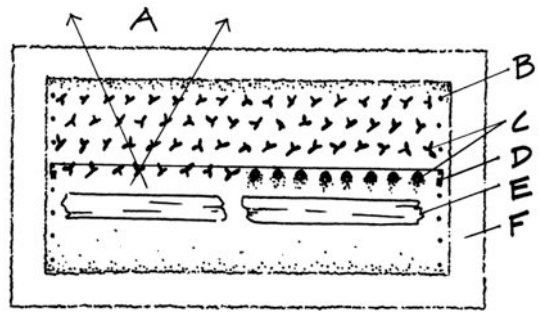


Loosen soil with a rake and re-level before planting. To get straight rows, check diagonal lines when placing plants.

8) Water in thoroughly by hand when finished.

Fertilizer. Once in the ground, bedding plants are top-dressed with fertilizers every four to five weeks. Fertilizer is broadcast over plants when the soil is moist but leaves are dry, and is then rinsed off of the leaves. These steps, in addition to carefully measuring appropriate quantities, are essential to avoid burning the plants. Again, because appropriate fertilization rates vary depending on the quality of the soil, Filoli determines rates by consulting periodic soil tests, and by following label rates. A common post-plant fertilization program is to use ½ lb Calcium nitrate fertilizer and ½ lb Nitroform fertilizer per 100 square feet.

Weeds. Filoli’s gardeners use a traditional approach to weed control. Beds are cultivated on a regular basis with 3-prong cultivators, which uproot weeds when they are small, so that they dessicate on the surface. Hula hoes are used in beds where plants are widely spaced, and in gravel paths. In situations where heavy winter rains leave the soil too soggy for cultivation, weeds are controlled by hand pulling. Gardeners do *not* use herbicides to maintain flowerbeds



(A) Straight Diagonals, (B) Bamboo Stakes, (C) Bedding Plants and Planting Holes, (D) String Line, (E) Planting Boards, (F) Hedge

or paths; it’s really our force of over 150 garden volunteers who help to keep the weeds in check.

Recommended Summer Bedding Plants :

- Ageratum houstonianum* ‘Blue Bouquet’
- Begonia* ‘Richmondensis’
- Heliotropium arborescens* (Heliotrope)
- Petunia x hybrida* ‘Primetime Salmon’, ‘Alderman’, Chiltern Seeds Deluxe Bedding Plant Blend
- Phlox drummondii* ‘Leopoldii’, Select Seeds: ‘Phlox of Sheep’, ‘Tapestry Mix’ (Annual Phlox)
- Salvia farinacea* ‘Victoria’ (Mealy Cup Sage)
- Zinnia elegans* ‘Benary Hybrids’ (Zinnia)
- Zinnia* ‘Profusion Apricot’

Recommended Spring Bedding Plants :

- Aquilegia caerulea* (Columbine)
- Erysimum hieraciifolium* (Siberian Wallflower)
- Myosotis alpestris* ‘Rose’, ‘White’ (Forget Me-Not)
- Myosotis latifolium*
- Nemophila menziesii* (Baby Blue Eyes)
- Primula x polyanthus* (Primrose)
- Viola cornuta* ‘Jersey Gem’ (Viola)

References & Further Reading:

Tolmach, L. (1997). Annual Phlox. *The Sundial Times*, 14, 3.

Fitler, M. (2000). Planning the Spring Beds. *The Sundial Times*, 24, 1,4.

Clarke, M. A Year in the Life of the Sunken Garden. *The Sundial Times*, 41, 1-4.

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