

Healthy Soil Healthy Food Webs- David Burke, Holden Forests and Gardens

- 1) Soil formation and development
 - a. We tend toward a chemical approach – fertilizer, some compost
 - b. Many soils are degraded or removed – especially in residential areas
 - c. Soil can be grown – much development since end of last glacial period
 - d. What do soils look like – solutions for poor soil
- 2) Soil food webs – alternative approach
 - a. The soil food web. Soil is alive! Not just dirt
 - b. Microbiome or soil and roots
 - c. Mycorrhizal fungi – plant partners
 - i. What are they?
 - ii. What do they do?
 - iii. Benefits
 - iv. Vegetables and crops
 - v. Trees
 - d. Fungi as decomposers
 - e. Helpful bacteria – nitrogen fixers
- 3) Plant roots as a habitat for critters.
 - a. Carbon flow into soil significant
 - b. Root turnover and death.
 - c. Mycorrhizal transfer
- 4) What can you do to insure healthy soil?
 - a. Organic
 - b. No till – or limit tilling
 - c. Cover crops
 - d. Buffer strips
- 5) If it's good for pollinators – it's good for soil fungi and bacteria. Generally speaking.
- 6) Questions?

Life's Short. Extend That Season!

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A) The Tyranny of Mother's Day

- 1) Boycott May
- 2) Resist!

B) The Five Effing Reasons to Choose a Plant (and a "b" word)

- 1) Flower
- 2) Fragrance
- 3) Fruit
- 4) Foliage
- 5) Form
- 6) Bark

Natural, No Makeup, Year-Round Beauties!

Acer palmatum cultivars (Japanese Maples)
Acer griseum (Paperbark Maple)
Acer griseum hybrids 'Girard's Hybrid' & others
Betula nigra 'Heritage' (River Birch)
Corylus fargesii (Farges' Hazelnut)
Fagus sylvatica cultivars (European Beech)
Fagus grandifolia (Beech)
Helleborus (Hellebores)
Lindera benzoin (Spicebush)
Metasequoia glyptostroboides (Dawn Redwood)
Parrotia persica (Persian Ironwood)
Parrotia subaequalis
Pinus bungeana (Lacebark Pine)
Platanus x acerifolia 'Suttneri' (London Planetree)
Prunus subhirtella pendula (Weeping Higan's Cherry)

Some Come Early

Crocus
Anemone blanda
Chionodoxa
Galanthus (Snowdrops)
Iris reticulata
Narcissus (Daffodils)
Scilla
Mertensia (Virginia Bluebells)
Phlox subulata
Pulsatilla vulgaris (Pasque Flower)
Magnolia stellata (Star Magnolia)
Loebner Magnolias 'Merrill' & 'Leonard Messel'
Magnolia 'Yellowbird'
Prunus x yedoensis (Yoshino Cherries)

Some Stay Late

Acer rubrum cultivars

Aesculus turbinata (Japanese Horse Chestnut)
Callicarpa species (Beauty Berries)
Lespedeza thunbergii 'Gibraltar'
Rhus copallina (Shining Sumac)
Rhus typhina (Staghorn Sumac)
Rhus glabra 'Laciniata' (Laceleaf Smoot Sumac)
Nyssa sylvatica (Blackgum)_
Oaks
Viburnum nudum 'Winterthur'
Anemone species & cultivars
Aster oblongifolia 'Raydon's Favorite'
Aster tataricus 'Jindai'
Helianthus 'Gold Lace'
Chrysanthemum 'Sheffield'
Chrysanthemum 'Will's Wonderful'

Some Come Early AND Stay Late

Amsonia hubrichtii (Arkansas Bluestar)
Aronia arbutifolia (Red Chokeberry)
Fothergilla species
Hamamelis species (Witchhazels)
Malus (Crabapples)

Persistent Little Devils

Ceratostigma plumbaginoides (Plumbago)
Leptodermis oblonga
Dahlia Mystic Illusion
Bidens Goldilocks Rocks
Evolvulus Blue My Mind
Lantana
Salvia Mystic Blue Imp
Tithonia
Zinnia

Winter Wonders

Twig Dogwoods
Deciduous Hollies
Ilex verticillata 'Winter Red'
'Red Sprite'
Ilex decidua 'Finch's Gold'
Ilex decidua 'Warren Red'

Summer Simmerers, Winter Warriors

Panicum virgatum 'Northwind'
Calamagrostis 'Karl Foerster'
Muhlenbergia capillaris
Schizochyrium scoparium 'Standing Ovation'

Read Scott (at least) monthly on **GardenRant.com**, and bi-monthly in the **Deep Roots column in Horticulture Magazine**. Although rarely updated, more information available at **scottbeuerlein.com**.