



The Flowers that Bloom in the Spring Tra La

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Lifetime Learning Institute

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*“The flowers that bloom in the spring, Tra la
Breathe promise of merry sunshine –
As we merrily dance and we sing, Tra la
We welcome the hope that they bring, Tra la
Of a summer of roses and wine*

*And that's what we mean when we say that a thing
Is welcome as flowers that bloom in the spring
Tra la la la la, Tra la la la la
The flowers that bloom in the spring”*

The Mikado

Operetta by Gilbert & Sullivan

Sung by Nanki-Poo



Spring Ephemerals

- First plants in spring & first to flower
- Uses sunlight through bare branches of deciduous forest
- Dies back by early summer
- Different From Other Plants
- Bloom regardless of late frost or snowstorm
 - Complete entire above-ground growth in few weeks
- Closes petals in cold & at night to protect pollen & nectar
- Provides season's first nectar to many pollinators
- Relies on symbiotic relationships with insects
 - Ants carry seeds back to underground nest, eats seed top (elaiosome), allows rest to germinate
 - Trout Lily miner bee only pollinates trout lilies
 - Spring Beauty miner bee only pollinates spring beauties
- Eastern NA produces multitude of spring ephemerals!

Thompson Wildlife Management Area



Photo: VisitFauquier.com

Skunk Cabbage

- Common but bizarre plant
- Earliest blooming flower
- Found where damp
- Flowers emerge before leaves
- Attracts pollinators with foul smell
- Generates its own heat 70 degrees
- Leaves cause chemical burn
- Lives up to 200 years
- Many uses by Native People
- 1800s Tincture of Dracontium



Photo: ARMN

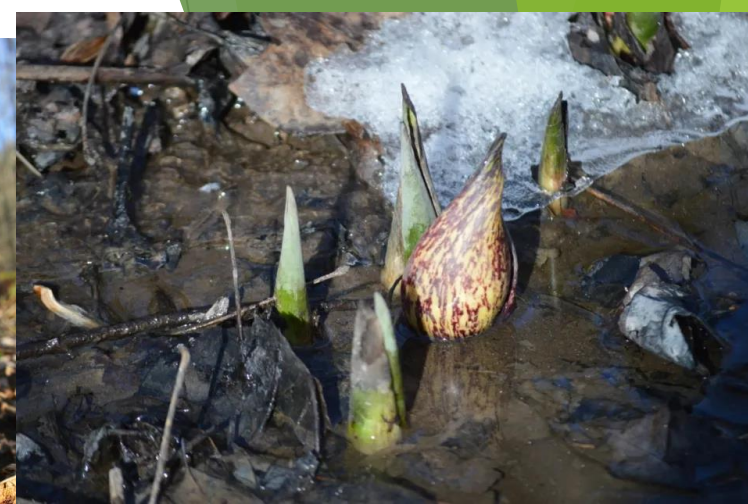


photo by Barbara J. Saffir



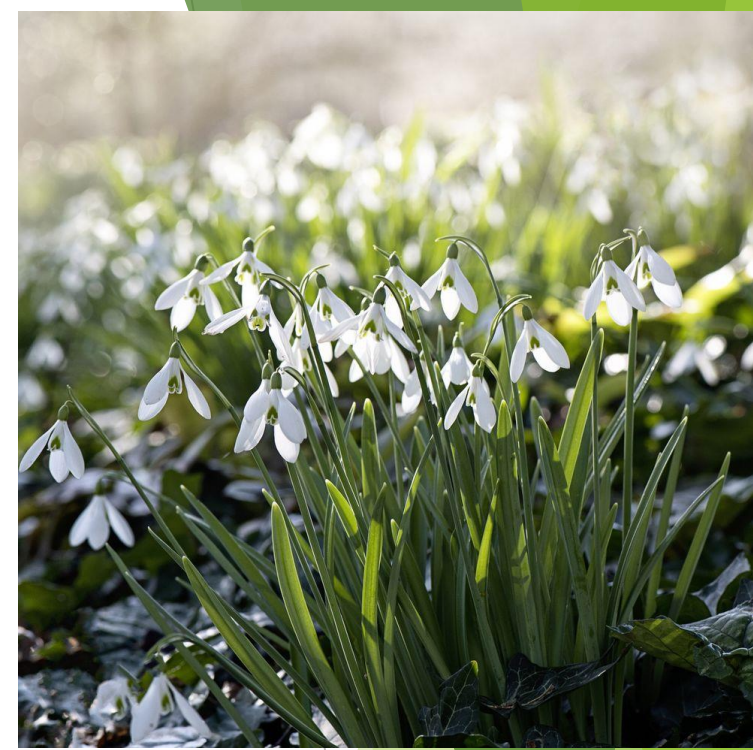
Photos: Alonso Abbugattus



Photo: virginiawildflowers.org

Snow Drop

- Non-native, from eastern Turkey and western Iran
- Milk white flower
- 19 species
- Blooms late winter - January snows
- Flower dangles
- Produces natural antifreeze
- Toxic - deer and rabbit resistant
- Pollinated by few early insects



Jacky Parker Photography // Getty Images



Photo: The Spruce

Eastern Spring Beauty

- Small, 5-petal pink or white flowers
- Close up when cold to protect pollen
- Pink stripes are nectar lines for pollinators
- Other ephemerals with less nectar mimic it
- The pollinated seeds "explode" up to two feet
- Seed coat attachments (elaisomes) attract ants
- Long blooming so many different insects can visit
- 23 species of bees visit; miner bee can't reproduce w/o its pollen
- "Fairy Spuds" -edible tuber roots taste like sweet chestnuts
- Common in Manassas National Battlefield Park



Photos: Alonso Abugattus



Lesser Celadine

- Invasive perennial ground covering
- Symmetrically round yellow flower – with sepals
- Buttercup family
- Crowds out ephemerals
- Poisonous to livestock; edible when dried/cooked
- Alt. name Pileroot to treat hemorrhoids (or “piles”)
- Hard to eradicate – ground disturbance spreads roots
 - Herbicides only practical control
- Not Celadine poppy (wood poppy)
 - similar flowers but uncommon
- Not Marsh-Marigold
 - Similar flowers (no sepals)
 - But grows in wet forests and bogs



Marigold left & lesser celadine right



Photos: Alonso Abugattus

Yellow Trout Lily

- 4"-6" tall plant with a fish-like mottled leaves
- Grows like ground cover near streams
- Yellow blossoms resemble miniature lilies
- Are true lilies and not violets
- Bulbs sink into soil over time
- Takes 8 years to bloom; some colonies over 200 years
- Only plants with 2 leaves bloom – about 1%
- Flower closes up when dark to protect pollen
- Trout lily miner bee & bumblebee major pollinator
- Only 10% of pollinated plants produce seeds
- Ants disperse the seeds by eating elaiosome appendages
- Lore has trout lily tea good for hiccups
- Native people used for stomach aches, fever reducer, & contraceptive
- Cherokee spit chewed leaves in water to catch fish
- Found at Riverbend State Park



Photo: Alonso Abugattus



Photo: Andy Lyons



Photo: Alonso Abugattus

Virginia Bluebell

- All across eastern NA
- Large colonies both in the wild and in cultivation
- Peak first or second week April
- Typically grow in moist woodlands and river floodplains
- Can be outcompeted by invasives such as lesser celandine
- Large, soft-green leaves and bright blue, white or pink flowers
- Plants emerge with purple leaves before turning green
- Pink buds before blooming
- Flowers hang downwards to protect nectar from rain
- Primary pollinator bumblebee queens & other long-tongued bees
- Lose pollinated petals soon so pollinators visit unpollinated flowers
- Lasts for only three weeks
- People favorite; Monticello called " Jefferson's blue funnel plants"
- Native people used for whooping cough, TB, & poison antidote
- At Riverbend SP, Burke Lake, Bull Run Regional Park & Manassas NBP



Photos: Alonso Abugattas



May Apple

- Native in moist woodlands
- Creates colonies through root system and box turtles
- Lobed umbrella-like leaves with fruit at Y
- Only Y stems flower
- Toxic but ripened golden fruit eaten and made into preserves
- Will grow under black walnut trees
- Flowers fragrant and pollinated by bubblebees and other bees
- Flowers in early May and “apple” ripens in late summer
- Podophyllotoxin (WHO essential medicine) & derivatives treat many cancers



Jack in the Pulpit

- Found in moist rich soils
- Pitcher like flower
- Fall berries bright red
- 3-leaved characteristic of plant, not symmetrical
- Changes sex throughout lifetime
- Pollinated by gnats and beetles
- Protected by producing calcium oxalate crystals
- Many medicinal uses



Photos: Alonso Abugattas

Trillium

- Most valued native ephemeral
- 50 species with bulk in eastern US
- 3 heart-shaped leaves, 3 green sepals & 3 petals
- Prefers slightly acidic soils and shade
- Red, white & yellow flower color (even in same species)
- Some showy; others hidden under a leaf
- Two major groups
 - flower sits above bracts whorls
 - flower rises directly from bracts
- Beetles primary pollinator of red trillium
 - Like smell & color so gather on flower & mate!
- Common name birthwort or Indian balm because chemical compounds in several used medicinally
- More showy wildflowers rare, threatened by pressure from collectors and habitat loss
- Found at Thompson Wildlife Management Area



Pedicellate Trillium
Photo: Sweet white trillium by Mark Pistrang



Sessile Trillium
Photo: Toad Shade Trillium by Mark Pistrang



Photo: Vassey's Trillium by Mark Pistrang



Red Trillium
Photo: Alonso Abugattus

Where to Find Ephemerals



Turkey Run



Thompson Wildlife Management Area



Manassas NBP



Potomac Heritage Trail

Photo: Julie McCool Riverbend State Park

Many other Ephemerals

- Bloodroot
- Dutchmen breeches
- Wood anemone
- Cutleaf toothwort
- Solomon seal
- Columbine



Photos: Alphonso Abugattus

