



Pennsylvania  
PENNSYLVANIA NATIVE PLANT SOCIETY

# notes

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## Eastern Red Columbine *Aquilegia canadensis*

*Aquilegia canadensis*. Photo: Ken Jones.

By Debra Grim,

PNPS Board Member and Penn State Master Gardener

The charming blossoms of this woodland native are seen throughout Pennsylvania March through June. It grows in many locations, but especially on cliffs and rocky slopes, particularly in limestone areas. The five yellow-tipped petals have long red spurs that give the genus its name. The spurs were thought to resemble eagle claws (aquila is Latin for "eagle"). Numerous yellow stamens hang below the petals. Five red petal-like sepals protrude between the spurs.

Several sources I consulted report that the native species will readily hybridize with the European species *A. vulgaris*, which is widely cultivated. I have never observed this. *A. vulgaris* flowers usually occur in shades of blue or pink. If you see a red one, it probably has some *A. canadensis* in its heritage.

Eastern red columbine has attractive compound leaves divided into 3 round lobes, like many members of the buttercup family, Ranunculaceae. Another common family trait is that the leaves are toxic. Hydrogen cyanide is released when the plant is damaged.

Columbine is attractive to hummingbirds, bumblebees, hawk moths, and other pollinators with long enough tongues to reach the nectar deep in the spurs of the flower. Insects with shorter tongues may chew into the spurs to get the nectar.

This species is the focus plant for this spring's PNPS plant sale because eastern red columbine is very suitable for gardens. A perennial, usually about two feet tall, it will thrive and grow in most soils as

long as they are fairly well drained, and it can take moderate shade to full sun. It self-sows freely. Plants grown from the tiny seeds will produce flowers in the second year. Eastern red columbine is lovely with other spring wildflowers such as wild geranium, ginger, and foam-flower.

The leaves are resistant to leaf miners (which plague other species of columbines) and to grazing by mammals due to their toxins. The plant does serve as a host to the caterpillar of a small butterfly, Columbine Duskywing, *Erynnis lucilius*. The leaves remain attractive after blooming as long as moisture is adequate. Cut them back once they turn brown.



*Aquilegia canadensis*. Photo: Ken Jones.



## 2018 Central PA Native Plant Festival and Sale

### Boal Mansion, Boalsburg PA • 10 am–3 pm

In spite of less than favorable weather conditions (cold and rainy) last year's Central PA Plant Festival was a success with close to 600 people attending. These die-hards came to buy and talk and learn — and that's the whole purpose!

We have put in a request for good weather this year — so plan on coming May 5 and take home some new babies for your garden! The schedule, vendor list and plant list is posted on the PNPS website. Most vendors welcome pre-orders, so you can be sure your new baby will be waiting for you!

Due to unavailability of the Military Museum, we have moved across the street to the Boal Mansion grounds. Not only are they advocates of native plants, they are partnering with us to provide more activities/talks. The Mansion provides us with the same visibility/exposure as well as plenty of vendor and visitor parking space. So we are excited and hope you will enjoy it as well.

To allow vendors time to set up, and to be fair to all visitors, plants are not available for sale prior to 10 am.

If you are interested in helping with the planning and/or volunteering the day of — please, let us know! You can contact us at [Info@PaNativePlantSociety.org](mailto:Info@PaNativePlantSociety.org)



## Rain Garden

### Tips from the Edge of the Woods

By Louise Schaefer, Pennsylvania Certified Horticulturist, B.S. Biology, Co-Founder Edge of the Woods Native Plant Nursery LLC — founded in 2003 by Sue Tantsits and Louise Schaefer. For more information: [www.EdgeOfTheWoodsNursery.com](http://www.EdgeOfTheWoodsNursery.com)

**N**atives are the perfect choice for a rain garden: Compared to a patch of typical lawn, a rain garden allows about 30% more water to soak into the ground. That's more water for the water table, and less pollution in our streams and rivers. Much of the pollution in our streams and rivers is carried there by storm water, which picks up fertilizers, car oil, and other contaminants as it washes over lawns, driveways, and roads.

Simply put, a rain garden is a collection of plants that don't mind getting really wet sometimes. The garden can slow and catch run-off as it fills with a few inches of water during rainstorms. The water remains in the garden and slowly filters into the ground. As it seeps down to the groundwater table, pollution and impurities are filtered out.

All you need is a small depression in your yard, which can collect water from a downspout, or from a natural area of run off. Your raingarden can be formally edged with stones, or it can blend gradually into the rest of your landscape. Just be sure it is far enough away from the foundation of your home that it does not cause basement seepage problems, and don't locate it over a septic field.

Since the water in the garden will be there for only a few hours after a rainstorm, you will need plants that can take soggy and dry soil. Some suggestions are switch grass, purple coneflower, phlox maculata, turtlehead, purplestem aster, ironweed, ostrich fern, swamp milkweed, monarda didyma, senecio aureus. You can even use shrubs such as winterberry holly, buttonbush, itea or clethra.



## The Digital Age for Botanists

By Harold W. Gardner

For at least 1,500 years botanists have been either drawing or painting plants. Then there is the practice of "smashing" and drying a plant for purposes of storing as a herbarium sample. Then, along came photography to show plants as living things of beauty. But, now we are in a digital age, in which we can capture a plant in great detail. One can cut a fresh plant, place it on a computer scanner, press the lid down, and scan

at 200 dpi, 300 dpi (dots per inch), or higher. The image can be expanded at will to easily see even the dots on leaves, stems, and flowers of *Hypericum punctatum*. Shown here are images of *Lithospermum canescens* collected by Diane Albright in the barrens near State College, and Mark Berhow near Peoria, IL (200 dpi). Also shown are a seed-head and seeds of *Amsonia tabernaemontana* in black and white scanned at 300 dpi. Clearly, this method is superior to any of the "ancient" techniques.



# 10 NATIVES PICKS FOR YOUR RAIN GARDEN

**1 *Liatris spicata* (Spike Gayfeather)** blooms July through August. The brilliant purple shines during hot summer days. It thrives in full sun, moist well drained soils but tolerates drought once established. It is beneficial to butterflies, native bees, and birds, including: hummingbirds.

**2 *Myrica pensylvanica* (Bayberry)** is an evergreen to semi-evergreen shrub that grows to 9 feet. It's very adaptable; thriving in moist, peaty or sandy, acidic soils, but also very tolerant of poor soils and wet to dry soil conditions, and salt spray. Birds will eat the seed (found on female plants). Both male and female plants are needed if you want the berries, which are used to make Bayberry candles.

**3 *Aster novae-angliae*/  
*Symphotrichum novae-angliae*** (**New England Aster**) prefers moist soils and full to part sun. Height reaches up to 5 feet with violet to purple flowers in late summer that provide nectar for butterflies including Monarchs. It is of special value to native bees, bumble bees, and honey bees. This easy plant is a cheerful addition to any garden.

**4 *Rudbeckia fulgida* var *fulgida*** (**Orange Coneflower, Brown Eyed Susan**) Has a long bloom season bringing joy to the latter half of the summer with delicate yellow blooms that go right past frost; for late season benefits for butterflies and beneficial insects. No garden is complete without it! It grows 2 to 3 feet and prefers moist soils in full to part sun.

**5 *Cephalanthus occidentalis*** (**Buttonbush**) is an unusual shrub that prefers moist to permanently flooded soil in the sun. Growing in an open habit to about 9 feet, its button like flower is of special value to native bees, bumble bees, and honey bees. It is somewhat deer tolerant so may also be a good choice if deer are an issue.

**6 *Echinacea purpurea* (Purple Coneflower)** is easy to grow in average, dry to medium, well-drained soil; in full sun to part shade. Attracts: birds, butterflies, and tolerates: deer, drought, clay soil, dry soil, shallow-rocky soil

**7 *Lobelia siphilitica* (Blue Lobelia)** is easily grown in rich, humusy, medium to wet soils in full sun to part shade.

Prefers part shade, will take full sun with enough moisture. Tolerates deer, heavy shade, wet soil and attracts birds, including, hummingbirds

**8 *Cronus sericea* (Red Twig Dogwood)** grows easily in consistently moist soil in full sun to part shade. Will grow in swampy or boggy conditions. Supports a wide variety of birds and also butterflies. Clay soil is OK, deer tolerant. Attracts: birds, butterflies

**9 *Tiarella cordifolia* (Foamflower)** is an attractive wildflower, which spreads by underground stems, forms colonies, and makes excellent groundcover for shady, wooded sites. Tolerate: rabbit, deer easily grown in average, medium, well-drained soil in part shade to full shade. Prefers humusy, organically rich, moisture-retentive soils.

**10 *Heuchera americana* (Alumroot)** is best grown in organically rich, humusy, medium moisture, well-drained soils in full sun to part shade. It is valued as a foliage plant and groundcover in shady Eastern gardens. Tolerates poor soil, low moisture, and lime.







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*Return service requested.*

## **PNPS Local Chapters — Forming Now**

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**By Danielle Lanagan, VP PNPS**

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The PNPS is in the process of creating PNPS chapters throughout the state. The goal of having chapters is to encourage local events and activities for our members spread throughout the state and to create opportunities to educate non-members about the benefits of native plants. Among other items, the state organization will: process memberships, host the website and calendar, provide informational brochures, and publish semi-annual newsletters. Some of the activities the chapters could provide are: garden tours, identification walks, workshops, talks and plant sales.

We are looking for people interested in helping to organize a chapter in your area. Several areas have already begun the process! If you are interested, please let me know, and we can connect you with other people who have also expressed interest. Please contact: Danielle Lanagan, [vp@panativeplantsociety.org](mailto:vp@panativeplantsociety.org)

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