



Early Spring Bloomer: Pasque Flower (*Pulsatilla patens*) Photo by Doug Sherman, courtesy of Lady Bird Johnson Wildflower Center

March 2023 Newsletter

Edited by Colleen Lyon

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We are switching from a monthly to a quarterly newsletter! Moving forward, all of our subscribers will receive the Wild Ones Front Range newsletter in March, June, September, and December. In the interim months, members only will receive emails with the latest events and other ways to get involved.

Volunteer Opportunities

Our chapter is run by volunteer members who are passionate about promoting native plant landscaping. More members becoming more active will help grow our chapter's success. We encourage you to share your time and talents in any way you'd like! Current priorities include the volunteer openings listed below.

Regional Coordinators

Are you interested in organizing member events in your part of the Front Range? Consider being a Regional Coordinator! Below is a list of our current Regional Coordinators, who are working to coordinate regional Meet & Greet events (thank you!):

- Boulder County: Emily Ken Cairn, wildones@livingcarbon.foundation
- *Douglas County*: Pam Schulz, pamschulz@comcast.net
- Jefferson County: Laurel Starr, laurelstarr@hotmail.com
- Larimer & Weld Counties: Suzie Muttel, suzie.muttel@gmail.com

Now, we really could use a coordinator for Denver proper and Colorado Springs metro!

Newsletter Co-Chair

Do you enjoy writing and sharing your passion for native plant gardening? Team up with our current newsletter chair to refine our content calendar and further streamline how we produce our newsletters. It could be a great "interning" position to learn valuable and marketable skills.

Programming Co-Chair

Do you like organizing educational programs? Team up with our current programming chair to plan webinars for the year and support the new Regional Coordinators as they organize in-person events in their part of the Front Range.

If you have an interest, please contact us to discuss and learn more!

Plant Spotlight

Favorite Early Spring Bloomers

By Michelle Kinshella

Dreary Old Man Winter is still upon us, but soon our calendar will be telling us it's Spring

—the gardener's favorite time of year! "Conventional" gardeners anticipate their tulips and crocuses, but we native plant lovers have so much more to look forward to, especially if you're willing to venture forth on a hike. My favorite springtime hikes to see the early beauties are William F Hayden Green Mountain Park (Lakewood) and Castlewood Canyon (Franktown).

At Castlewood Canyon you are likely to come across a favorite early bloomer, the Pasque Flower (*Pulsatilla patens*). Covered in hairs like a fur coat to keep it warm in the event of a Spring snowstorm, the Pasque Flower's purple or blue petals with bright yellow stamens reminds one of an Easter egg. And the joy of finding an Easter egg is similar to the joy experienced when you spot one of these gems on your trek. They typically prefer some shade, so you may have to look closely to find one (available for your viewing pleasure from April to June). In your garden, you can plant them under a late-leafing out deciduous tree, as they bloom before the shade comes.



Pulsatilla patens and Leucocrinum montanum (left to right), photo by Bransford, W.D. and Dolphia, courtesy of Lady Bird Johnson Wildflower Center.

Hayden Green Mountain, however, is the place to go if you seek the sun-loving early native flowers. There you are likely to come across my other favorite: the Star Lily (*Leucocrinum montanum*). Blooming in a basal rosette of narrow, grass-like leaves, this distinctive little lily is unmistakable. According to the Ladybird Johnson Wildflower Center website, this is the only species of its kind. Like the fading stars of a fireworks outburst, the Star Lily lives up to its name. They bloom from April to June.

A March bloomer is the Easter Daisy (*Townsendia hookeri* or *T exscapa*). Its solitary flower head, composed of numerous white to pinkish petals surrounding a yellow center, is basically stemless. They form a low mound, which is a successful strategy that helps to maximize heat retention during colder periods.

Also keep an eye out for Blue Flax (*Linum lewisii*). It typically shows up in April and can last until September through October. With a blue flower and wispy foliage, it can be seen along the E-470 bike trail, and can get as tall as two feet, with tiny one-inch flowers. In your garden, it is easily one of the showiest native wildflowers in spring with its bright blue color.

Arriving in May, Golden Banner (*Thermopsis divaracarpa*) has bright yellow-as-sunshine flowers that make you happy just looking at it. A member of the Fabaceae family, Golden Banner can be found in part-shade environments.



And finally, the list would not be complete without the mention of Rocky Mountain Spring Beauties (*Claytoni lanceolata* var. *rosea*). This native flower only grows up to 6-inches tall, with blooms of white, pink and red. According to the Lady Bird Wildflower Center website (see link above), they might be seen as early as March, and like to grow on hillsides and mesas of montane ponderosa and Chihuahuan pine and oak belts.



Claytoni lanceolata var. rosea (photo courtesy of www.rockymountainsflora.com)

Do you enjoy scavenging for flowers?

Consider signing up for EcoQuest emails from the <u>Denver Botanic Garden's</u> <u>EcoFlora EcoQuest Project</u>, which is a citizen science project with about 230 participants. This project was launched in 2020 with two main objectives: 1) engage citizens in observing, protecting, and preserving the metro area's native plant species, and 2) assemble data on the metro area's flora to better inform policy decisions regarding land management and

How to sign up for EcoQuest emails

- Go to Denver Botanic Gardens' e-newsletter sign-up page
- Halfway down the list of "What garden activities are of interest to you?" check "Denver EcoFlora EcoQuest" to receive the EcoQuest emails.
- Then download the iNaturalist free app or register online at iNatualist.org.
- Take photos of the EcoQuest flower as identified in the EcoQuest email you receive.
- Post your observations on the iNaturalist

app, which will automatically be added to the Denver EcoFlora Project.

Spring Stem Cleanup

By Jenifer Heath

NOTE: For some of you, this may seem like "extreme ecological gardening." We just think if you are gardening for the ecological benefits, this is what the science is pointing to now and is relevant information for you.

Honey bees are native to Europe and were imported to the U.S. There are over 900 different bee species that are <u>native</u> to Colorado. About 30 percent of our native bee species nest in stems. Most are not yellow and black and only 12 percent of species are social; the rest are solitary. According to CBS News Colorado, our native bee population has decreased by 72 percent over the last 25 years. This article is intended to share information that will help us support our stem-nesting bees.

How quickly science provides new information meant to inform or influence our behavior! It seems it was just a few years ago that I learned to curb my yard cleanup practices at the end of the growing season. In support of the ecosystem and habitat, I do not do fall yard cleanup - no cutting down of autumn stems for me! We leave the stems up so native birds can dine on the seeds of those plants through late fall and winter, and so bees and other invertebrates can nest and shelter in the stems. I also leave the leaves, in which many adult and larval insects and other invertebrates overwinter. And this year I started moving "extra" leaves into piles under trees to enrich the soil, provide winter shelter for invertebrates, and contribute to a soft landing for insect life stages that may leave the trees to shelter in the leaves below.

With the approach of spring, I've been thinking of spring cleanup. The guideline used to be something like: "don't cut down hollow/pithy stems until the outdoor temperature is consistently over 'x' degrees." But now we know that is not an optimal guideline. Creatures are not overwintering this winter in the hollow/pithy stems that bloomed this past season; rather it is a three-year cycle.

First, evidently insects don't nest or shelter in living stems of plants. So there may be no insects, eggs, larva or adults, in the stems that first winter. Second, because bees of different species have very different lifespans and seasons, they build their nests and provision cells for their offspring at different times of year. Some bees will be provisioning hollow/pithy stems very early in the spring, but others won't even emerge as adults until fall and it will be late fall by the time they are provisioning cells or providing nesting for their offspring. If we cut down stems each Spring, we are eliminating the next generation of native stemnesting bees. Read on for the solution!

The Three Year Approach

- *Year 1:* This is the year that the stems are alive and supporting blossoms and seeds.
- *Late Winter Year 1:* Remove the seed heads from the top of hollow/pithy stems, leaving an 8- to 20-inch stem standing. Sharp cutting tools are recommended for this task, simply because that leaves behind a neat stem top that is easier for the insect to seal off to protect her next generation.
- Early Spring Year 2 (when we used to remove the hollow/pithy stems): Simply trim

off the seed heads, leaving the hollow/pithy stems at a height of 8 to 20 inches.

- *Throughout Spring, Summer and Fall Year 2:* Female insects are provisioning cells and laying eggs in the dead hollow/pithy stems.
- *Winter Year 2:* All appears quiet for these stems, but the next generation is developing and waiting for their moment to emerge.
- *Starting Spring Year 3 through Fall Year 3*: The next generations of the various species emerge, each in their own season.

See also "How to Create Habitat for Stem-nesting Bees" in the resource section below.

In other words, to play their full role as habitat and to support development of the next generation (and in the bigger picture, the survival of above-ground nesting bees and perhaps others), hollow/pithy stems must remain in place for 3 years. If we remove them too early, they will have had no nests in them (Winter Year 1) or we will be destroying and discarding (or composting) all the nests, eggs, larva, the entire next generation.



Photos courtesy of www.pollinatorsnativeplants.com

Speaking for myself, it's hard to imagine or think about what my yard will be like with that many old stems that will not be cut down. Stems will be in my yard the first year when they have flowers on top and the entire second year while bees and other insects are laying eggs for the next generation and provisioning nests in those hollow/pithy stems, and then the third year when the stems need to be there for that next generation to emerge. It's hard to contemplate.

But it might be less noticeable or less messy-looking than I imagine. As Heather Holm (see below for a link to her website) points out, the old stems will be there. But the roots remain and at some point in spring or early summer, the new green parts of that plant will overtake the stems, or hide them, if you will. Personally, I imagine that after 3 years the stems will be ready to take care of themselves and won't need to be cut down, but I won't know that for sure for a couple of years yet.

This late winter/spring (Winter Year 1, Spring Year 2), my plan is to remove the seed heads from the top of hollow/pithy stems, leaving the hollow/pithy stems at heights of 8 to 20 inches. I have read that both large/wide and small/narrow stems may be hollow/pithy, with different sizes appropriate for different bee species, so I will not discriminate based on width. But I'm only going to leave the <u>hollow/pithy stems</u> (not nearly all of the stems in my yard). To simplify my task and focus on leaving in place the "right" stems, I've done a bit of research as to which genuses (the plant classification level above species or the first name in the scientific name of a plant) have hollow/pithy stems and which ones are native in my area. Below is a list that I have put together based on several sources.

A few other things I've learned: (1) it will <u>not</u> work to cut down the stems and pile them

somewhere else, and (2) it will <u>not</u> work to cut down the stems and somehow cage them so that they're standing somewhere else. Ecologically that would not be the same as a stem in place in the yard.

I hope that in two or three years many of us will be talking about what happened when we did not cut down hollow/pithy stems for 3 years. Will our neighbors even notice? Did anyone complain? Were they open to the reasons to leave hollow/pithy stems in place? Will an increase in insect numbers and diversity be evident in our yards or neighborhoods? Did you find certain plant species to be used for nesting more heavily? Not at all?

Resources related to stem cleanup:

- Heather Holm An expert in native bees (this links to a document on her website), where you can find a page called "How to Create Habitat for Stem-nesting Bees" (also included as a photo here) that illustrates seasons and years of stem use.
- Tufts Pollinator Initiative ("The right way to leave stems for native bees") - I highly recommend reading this brief piece. The point is that it's not just about waiting until spring to do garden cleanup (i.e. cut down old stems) – rather it's a multi-year process for stems to live, then later host insects or eggs until they emerge. There is a lot of additional information in the comment/response following the main article.
- My (preliminary) list of hollow/pithy stem plants - stems in which insects may nest, overwinter, and lay eggs (leaving these stems standing for 3 years is important if we want the next generations of the insects that use them): Solidago rigida or speciosa (goldenrod), Ratibida pinnata (or maybe columnifera), Echinacea pallida (and maybe angustifolia or purpurea), Symphyotrichum (asters), Silphium (like cup plants, rosinweed), Helianthus (sunflowers), Eutrochium (joe pye weed), Panicum virgatum (switchgrass), Sorghastrum nutans (Indian grass), Sporobolus heterolepsis (prairies drop seed), Schizachyrium scoparium (little bluestem), Andropogan geradii (big blustem), Rubus spp (raspberries), Monarda (bee balm). I suspect that other species in these genuses may also have hollow/pithy stems (reminder: Domain, Kingdom, Phylum, Class, Order, Family, Genus, Species, [Variety])

How to Create Habitat for Stem-nesting Bees



Graphics and content: Colleen Satyshut, Elaine Evans, Heather Holm, Sarah Foltz-Jordan

<u>5 Ways to Increase Nesting Habitat for Native Bees</u>

- Flower Stalks for Bees Nests
- <u>Bird-Friendly Winter Gardens</u>

Advocacy News and Action

Colorado Continues to Invest in Turf Conversion Programs

As discussed in the <u>February WOFR newsletter</u>, the Colorado General Assembly enacted House Bill 22-1151 in June, 2022. This legislation established a statewide turf replacement program and authorized a limited amount of funding to accelerate lawn conversions. Grants provided under HB-22-1151 will complement and further support the existing rebate and incentive programs of local municipal water providers, which were detailed in the February newsletter, and help establish and support new local programs throughout the state.

The Colorado Water Conservation Board (CWCB) is the agency charged with administering this program. HB 22-1151 appropriated \$2 million to the CWCB over a 2-year period. After accounting for administrative costs, CWCB plans to spend approximately \$750,000 during each of two funding cycles. \$1.1 million (\$550,000 per cycle) will be available to leverage incentives currently provided by water providers and \$400,000 (\$200,000 per cycle) to establish and support new programs.

New Grant Programs

On January 25 of this year, the CWCB launched its <u>competitive grant application program</u>. The initial application period runs from January 25, 2023 to March 31, 2023. Funding is not expected to exceed \$25,000 per funding cycle for any one eligible entity. Applications must include a dollar-for-dollar match for the funds being requested. In some cases, a combination of cash and/or in-kind contributions may be considered.

Eligible entities can apply for funds to either expand their existing community turf replacement or request support for starting a new initiative. The following types of entities are eligible to apply:

- *Local Government* (municipalities, counties, cities, public agencies, municipally owned water providers)
- *Districts* (metropolitan districts, special districts, water districts, water and sanitation districts, conservancy districts)
- *Nonprofits* (organizations with 501(c)(3) status who work in water with related skills and capacity)
- *Colorado's Federally Recognized Tribes* (Ute Mountain Ute and Southern Ute Indian Tribes)

The new program also includes a <u>Transformative Landscape Change (TLC) Challenge</u>, which is a smaller competitive grant program under which three selected communities across Colorado can have up to 2,000 square feet of turf removed at a single location and obtain replacement Garden in A Box kits. CWCB has partnered with Resource Central to administer these grants.

Novel aspect of the new CWCB program: It allows qualified non-profit organizations to apply for grants to establish turf replacement incentives. While HOAs are not eligible, there may be other types of organizations that could apply. For example, local watershed protection groups might have the interest and capacity to receive grants.

Significant drawback of the new CWCB program: It does not prioritize the use of native plants in the grant application and award process. Rather, it uses the dated term "xeriscaping," which could include non-native low-water plants that do not provide the ecological benefits of natives, or even areas of gravel, rock, and other hardscaping.

While HB-22-1151 is a good way to boost turf replacement efforts in Colorado, the economics remain challenging. A very preliminary estimate of the benefits of this \$2,000,000 program by BBC Research & Consulting indicated that it might increase lawn conversions by 1.1 million square-feet (25 acres) in total over two years. This would be about double the area of turf (just over 23 acres) that was replaced during the most recent reporting year by a total of 12 of the largest front-range water providers. While the cost assumptions in this report may be greater (or less) than the actual costs encountered by some homeowners, this is still a very small number compared to BBC's midpoint estimate that there are about 104,000 acres of turf in Colorado.

Other Efforts

Reduction and removal of non-essential turf: HB-22-1151 is also just one part of several other turf and landscape transformation efforts underway in Colorado. In connection with the current existential threats to the Colorado River, Denver Water, Aurora Water, Pueblo Water, and other major Western water providers diverting from that River recently executed a memorandum of understanding calling for a 30 percent reduction in "non-functional" or "non-essential" turf in their service areas. HB-22-1151 also encourages the removal of non-essential turf. This category includes medians, areas adjacent to open spaces or transportation corridors, areas with greater than a 25-degree slope, stormwater detention basins, commercial, institutional or industrial landscape areas, areas irrigated by HOAs, and portions of residential yards. BBC estimates that there may be around 26,000 acres of non-essential turf in Colorado. A 30 percent reduction of non-essential turf just in the service areas of the water providers who are parties to the MOU would represent an enormous increase in the current pace of lawn replacement.

Restrictions on new turf: Given the cost to retrofit existing turf with waterwise landscaping, the CWCB and most water providers recognize that an essential tool in achieving water savings and encouraging the use of native and low-water plants is to prevent turf from being planted in the first place. To this end, Aurora and Castle Rock have enacted strict limits on the use of non-essential turf in new developments or redeveloped areas. Other water providers are expected to follow suit. This will create a huge opportunity for the introduction of native plants in the urban and suburban landscape.

Finally, it will be essential to promote equity in the expenditure of public funds for these purposes. Many homeowners and renters are not in a position to participate in turf replacement programs, and turf replacement funding is mainly used by people in higher socio-economic groups. By focusing on parks, commercial areas, medians, and other public spaces in under-resourced neighborhoods, as well as increasing the subsidies available in such areas, the environmental and ecological benefits of native and low-water plants can be more equitably distributed.

What You Can Do!

- <u>Contact the Colorado Water Conservation Board</u> and request that it prioritize the use of CO local and regional native plant species in the HB-22-1151 application and grant-making process.
- Contact your local water provider and request that it apply for grants under HB-22-1151 to increase the funding available to their turf-replacement program, or to start

one if none exists, and that they prioritize the use of CO local and regional native plants in the implementation.

- Consider whether any non-profit agencies with which you are involved would be a candidate for a HB-22-1151 grant and encourage them to apply.
- Request that your town, city, county, or other land-use planning jurisdiction establish strict limits on future non-essential turf.

If any of you out there have a personal advocacy experience to share, or have experience or interest in policy advocacy to contribute to this column and/or join the advocacy committee, please <u>email Danna Liebert</u>, WOFR Advocacy Committee Chair.

Volunteer Spotlight



Idelle Fisher

Wild Ones Social Media Volunteer, Website Designer, Graphic Designer and Passionate Gardener

Meet Idelle! She is an avid gardener - to say the least! Idelle grew up in Thornton, Colorado and is a DU grad in graphic communications. Idelle runs an organic community garden in Denver where she's worked with the members to create pollinator habitat featuring many native plants. Idelle also has a large organic landscape and garden at home. She and her husband recently replaced some of their front lawn with a native plant bed.

In addition to gardening, Idelle runs her own business offering Website Design and Graphic Design, and loves working with "green" clients who are helping to change the world for the better (check her out at <u>picklewix.com</u>).

When answering three simple questions, Idelle demonstrated her enthusiasm for conscious gardening.

Why I am involved with Wild Ones Front Range:

"It is great to have like-minded passionate people to support local wildlife and promote non-pesticide use. I am now the Social Media voice for our Chapter and believe that Wild Ones is a great contributor to the Front Range garden community as we can learn from others' experiences and perspectives, and share native plants and seeds!"

My three favorite native plants:

"Only 3... no way! Rocky Mountain Penstemon, Hardy Geraniums, and Goldenrod."

What are my most used garden hacks?

"Mulch in place. I deadhead then tuck the debris under the plant. It's free mulch! The method is called chop and drop. I added the tuck!" Word on the street is that Idelle is a fanatical weeder!

"As far as planting seeds, the best is to start seeds by winter sowing. I use milk jugs and sprout some of my veggies and native plants. To be successful we really need to keep them moist over the winter."



The Wild Ones Front Range chapter thanks Idelle for her volunteer work with us, posting our social media content, and advising us on our website. Idelle is a treasure to work with.

Upcoming Events

Check out our website's Events List to learn about and register for events!

Important notice: We announce many of our events to members first, as our events are popular and sell out fast. So, if you are not a member, please consider becoming one!

Watering Your Native Garden: Could you, Would you, Should you? Tuesday, March 28, 2023 6:30 - 8:00 pm



Member Meet & Greets

Larimer & Weld Counties (Fort Collins) Saturday, April 15 9:00 - 11:00 am

> Jefferson County (Lakewood) Saturday, April 15 1:00 - 3:00 pm

Douglas County (Southern Douglas County) Saturday, April 29 10:00 am - 1:00 pm

Noxious and Other Weeds Saturday, April 19 6:30 - 8:00 pm

Colorado Native Plants You Shouldn't Live Without Led by Wild Ones Front Range Board Members at Harlequin's Gardens Saturday, June 10 10:00 - 11:30 am

We love to hear from you! If you would like to comment on anything in this newsletter or

Wild Ones Front Range Chapter | https://frontrangewildones.org/

