Wild Ones
NATIVE PLANTS, NATURAL LANDSCAPES
FRONT RANGE

Photo by Danna Liebert
Depot Prairie Park

June 2022 Newsletter

Edited by Colleen Lyon

In this newsletter...

Join or Gift a Wild Ones Membership today!

Upcoming Events

Important notice: From here on out, we will be announcing our events to members only, first, as our events are popular and sell out fast. So, if you are not a member, please consider becoming one!

Boulder Seed/Seedling Swap
Boulder Public Library, Meadows Branch

June 4, 1pm - 2:30 pm

This is not exclusively a native plant event, so please seek out the native seedling designated area. If you are a Boulder County resident, please consider getting involved - we need native seedlings and volunteers. Interested in getting involved? Please contact Jennifer Frazer at ranatrafusca@yahoo.com.com for more information.

Golden Private Native Garden Tours
Golden, CO

June 09, 2022
5:00 pm - 8 pm

Join us as we tour two home landscapes in Golden, Colorado
Please click here for more information.

Guided Native Plant Hike at Private Ranch near Larkspur, CO

June 11, 2022
8:45 am - 12:00 pm

Join us on a hike near Larkspur, Co. at a property with high prairie meadows and impressive cliff edge crevice rock gardens, featuring native plants that can grow in your own garden. Expect a gently rolling 2 – 3 mile hike in beautiful landscape featuring flowering native flora and identifying many of the native plants we love in Colorado!

For More Information and to Register

Please send us an email requesting to be on the waiting list, as this hike is currently FULL

Denver Pollinator/Native Plant Swap and Giveaway

June 12, 2022
10:00 am - 1:00 pm

The People and Pollinators Action Network, EarthLinks, Wild Ones Front Range Chapter, and the Metro Denver Chapter of the Colorado Native Plant Society are partnering for this year's Native Plant Swap and Giveaway at Earthlinks, 2746 W 13th Ave, Denver.

The event is free to attend and open to the public. The variety of species and quantity of plants is dependent on voluntary donations from community members like you. If you plan on bringing native plants to swap, be sure to label each one that you bring with plant tags or masking tape, providing as much information as possible. List the common name, botanical (Latin) name, sun requirements (Sun, Part Shade, Full Shade) and moisture requirements (High, Moderate, Low, Dry/Xeric), if you know them. Please add what you intend on bringing to the event here.

Please ensure that any plants you plan to share at the swap are grown free of chemicals to protect pollinator health: this means no herbicides, pesticides, fungicides or synthetic fertilizers. The bees will thank you!

Volunteers are needed to help with set up on 6/11/22, and day of event facilitation and breakdown on 6/12/22. To sign up for a volunteer shift, click here.

Fort Collins Native and Pollinator-Friendly Plant Swap

June 18, 2022
9:00 am - 2:00 pm

Fort Collins Native and Pollinator Plant Swap will be part of the City of Fort Collins Xeriscape Garden Party. Come enjoy the fair and check out the plant swap to pick up some native and pollinator plants and if you can, share some too! More details soon!

Fort Collins Private Native Garden Tours

July 16, 2022
9:00am - 11:30 am

Join us as we tour two native plant landscapes in Fort Collins. Click Fort Collins Private Native Garden Tours for more information

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Garden Myths #2

by Deborah Lebow Aal

The 'Gardening Myths' article I wrote last year was our most popular article ever. It has been reprinted in several other newsletters, including Denver Audubon (linked here), and we received many comments. Following up with 'Gardening Myths #2' was inevitable. In most cases, there is no right or wrong 'answer' to gardening questions. There are more than two sides to most issues, and one's choice or conclusion can depend on what one is trying to accomplish. This makes most answers complicated. Again, I am not a scientist, but I have real world experience and I can Google with the best of them. So, I'm back with a few more myths to bust.

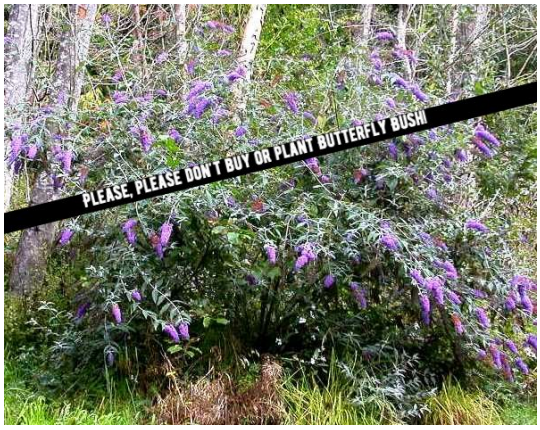
Myth: Butterfly Bush (Buddleia davidii) is a good plant for attracting butterflies

Let's get this easy one out of the way first.

No, it's not. Butterfly Bush is a brilliant name and deceptive marketing ploy. People buy this plant for its name, expecting it to be 'the' plant for butterflies without doing the research to find out if this an ideal plant for butterfly attraction. Butterfly Bush actually has a few key strikes against it:

- It does not attract as many butterflies as other plants (although it will attract some).
- It is not a host plant (*) for butterfly larvae, which makes it not a great plant for the butterfly life cycle.
- It is not a native plant to the U.S. In fact, it is an invasive plant on the east coast of the U.S., and on the do not plant list, there. Originally from China, it has crowded out native plants in warm climates, and has become a noxious weed, spreading aggressively.

There are many better plant choices if your goal is to attract butterflies. Much better, if you want to host butterflies, are plants in the milkweed family (*Asclepiadaceae*). My personal favorite is *Asclepias tuberosa*, Butterfly weed, a common name easily confused with Butterfly Bush - another reason to learn the latin names! Don't plant Butterfly weed where your sprinklers sprinkle - it does not like a lot of water, and prefers well-drained gravelly soil. Once it puts roots down, though, you'll have lots of these plants. It has gorgeous orange flowers, reseeds, and requires no fuss. And you will have caterpillars and butterflies galore. There are many lists out there of native plants that attract butterflies. Here is an article we published on this subject.



Butterfly Bush

Butterfly weed - plant me instead!
Photo by Thomas Muller, courtesy of Lady Bird Johnson Wildflower Center

Myth: Compost should always be added to soil when planting plants. What about native plants?

This topic was suggested by a Wild Ones member. She wrote (and I've abridged):

There is an ongoing discussion between local landscapers and me about how much compost should be added for native plant species. They have been using a 50:50 ratio of compost to soil and have seen good results, albeit in gardens that are only about three years old at the oldest. Everything I've read from landscaping books on planting Colorado native plants and other xeric species, to CSU Extension info, to Wild Ones and CoNPS brochures, to direct emails with Susan Tweit, etc. say that most CO native species prefer soils without a lot of nutrients. They say that large amounts of compost can cause plants to grow well and look fabulous the first 2-3 years, but then pay the price for that initial energy expenditure and will decline over time and not live their full natural longevity. Here in Salida, the soils are not clayey and drain decently, so although I understand the need to add something to minimize compacting, it seems unnecessary to add that much compost or to enhance drainage. One of the local landscapers said she consulted a desert plant ecologist about this, who did not think native plants would die prematurely or not thrive under conditions where there is high nutrient content with 50% compost. While in my mind it makes sense to try to match the conditions where the species grow in the wild, would it do harm to enrich the soil to that degree? Could y'all verify whether the information on soils for CO natives is a myth or not?

Alas, not a lot of scientific literature on this. In my experience, native plants do not need any compost or additives to thrive. I have never amended my clay-like soil to put in native plants, and they are thriving, eight to ten years in. It seems like a waste of effort and resources. That's my non-scientific view. Now, the potentially scientific literature (potentially because no scientific studies are cited):

Colorado Mountain Gardening Basics – 7.244 a paper by Colorado State University Extension, states: *"Native plants are often adapted to leaner soils (lower in organic material), and may 'flop' or have a shortened lifespan in well-amended soils."* The document also states that *"Chicken manure is deadly to native plants because it's high in phosphorus. Mushroom compost kills the soil bacteria."*

Native Plant Revegetation Guide for Colorado by Colorado Parks and Wildlife (CPW) states: *"Most native plants in Colorado have evolved to thrive in low nutrient soils and will not benefit from high doses of nitrogen nearly as much as will competing non-native weeds."* The document also states: *"Colorado soils typically have low phosphorus levels and native plant requirements for phosphorus are small."* From this guide, we know that Colorado native plants don't need extra nitrogen or phosphorus, both things common in compost; however, the guide is confusing as it also states: *"…when fertilizer use is appropriate, a low level or slow release fertilizer is suggested for the growth of native plants. Organic fertilizers are good since they provide macronutrients (…) and micronutrients (…) and organic matter to the soil or substrate."* Examples of organic fertilizers include, well, compost!

The Myth of Soil Amendments (neither Colorado specific, nor specific to native plants) by Linda Calker-Scott, a professor at Washington State University states: *"Eventually, amended planting holes will have negative consequences for plant health."* Her argument is that the roots circle down into the amended soil, not reaching out into the neighboring non-amended soil, which inhibits the plant's growth. She also states, *"…there is a multi-million dollar soil amendment industry that has little interest in debunking this myth."* She reminds us that ideal soil has only 5% organic matter by volume. In Colorado, that number may be even lower. This fact - that a plant's roots will want to stay in the amended soil - is also the reason that bare-root planting (**) is gaining in popularity.

I don't know these folks, but "John and Bob's Smart Soil Solutions" argue that adding compost can create a soil interface drainage problem in which water pools in the amended area, which is not good for the plant. And these are people who sell soil amendments!

And, one more voice. Kenton Seth, of Paintbrush Designs, in the Front Range design document he produced for Wild Ones, states: New homes typically have poor, compacted soil and will benefit from adding a thin (1/4-1/2") layer of compost or a generous sprinkle of alfalfa meal on the soil, then worked it in… Soils around older homes will usually have sufficient nutrition and not need additional compost. If replacing a well-established lawn, usually no soil amendment is necessary.

So, I'm convinced - you do not need to amend your soil when planting native plants in Colorado. Whether amending your soil will shorten the life of your plant is unknown. (Note: not amending soil does not apply to non-native annual vegetables and other exotic species - see another myth on composting below).

Myth: The color of gravel mulch you put down matters.

Well, yes, actually it does. This question is also from a Wild Ones Front Range Chapter member:

Regarding heat islands from gravel mulch, the point is well taken. Gravelly mulch most closely mimics the natural substrate seen for most of the native species that I hope to plant. However, presenters at the 2021 online CoNPS native plant conference advised to avoid using very dark or white mulch around plants that may be sensitive to heat that can be generated from absorption in the former and reflected by the latter. Is this a myth, too?

The commenter is referring to our first Garden myths article, where we make the argument that pea gravel (or chip rock gravel) mulch is a better mulch for native plants in Colorado than organic wood mulch.

I did not find any scientific studies on whether dark or light colored gravel makes a difference, but it does seem to make sense that dark gravel will not help the plants in our warming climate. It's getting too hot for dark mulch. I do think a light-colored gravel is the way to go. At Depot Prairie Park, in Englewood, one of the Wild Ones Front Range Chapter demonstration gardens, (****) we used a very light, almost white, pea gravel. The plants are thriving. In fact, the white sets off the color of the plants beautifully, and makes them pop.

I found one reference to dark gravel in the CSU extension document Colorado Mountain Gardening Basics – 7.244. It states, *"…pea gravel may increase the soil temperature particularly if it is dark colored."* So, in the early spring, when we may want to increase the soil temperatures, a darker color may be preferable, but certainly in summer, that is not what we want to do. And since you are not going to change the pea gravel out every season, I am opting for light-colored pea gravel.

One more note on pea gravel. I am using that term because it is what most people know. Chip rock or crushed stone mulch (more angular) is preferable to pea gravel (more rounded) as it blocks light and stays together better than pea gravel, according to experts.

Myth: We need more trees on the Front Range

This one can probably only be debated at this point. We need more data.

As the Front Range was short-grass prairie back in the day, it was pretty much devoid of trees, save cottonwoods in riparian areas and some scrub oak. Once you get a little elevation gain, we did have ponderosa pines, spruces, bristlecone pines, etc. But, down here on the Front Range, we did not have trees. So, what is the native plant gardener to do? We did write a whole article on trees (actually, many but we'll link to just one), but there are pros and cons to trees on the front range.

The City of Denver is gung-ho on planting many trees (with its "Mile High Million" goal of planting 1 million new trees by 2025). The city can give you a dollar amount that trees contribute to the economy in ecosystem services - citing the facts that well-placed trees will save heating and air conditioning costs, sequester carbon, provide stormwater benefits, actually increase the precipitation in and around Denver, and reduce the heat island effect of the built environment, etc. And they don't even get to the benefits for wildlife. While it is true that trees require watering in our climate, the water they require is outweighed by the benefits. That's what the experts say.

That said, trees can be expensive to maintain. You can't just plant a tree and not pay attention to it. It requires pruning, once large, and taking one down is expensive. And I've seen many misplaced trees. So, the answer is, as usual, complicated. I think there are native tree options that are a really good idea to place in your landscape. Trees like Chinkapin and Gambel Oaks are a great option. They don't get too big, are great for wildlife, and don't require much additional water. Beyond those, there are many lists of trees that CSU extension and others have put together that are good options, although not many are native to this area.

I would like to see a comparison of how much carbon deep-rooted native prairie plants sequester compared to trees. I have yet to see that comparison. Given the water savings of native plants, it may be worth considering these as a tree alternative. But since I have no evidence to show the potential advantage of this, it's just a point to consider right now. Here is an article that argues that increased drought and wildfire risk may make grasslands more reliable carbon sinks than trees. And a discussion thread on this topic that details the complexity of this issue.

I don't think we have an answer to this one. I think we can safely say plant more native plants, and yes, maybe more native oaks.

Quercus muehlenbergii, Chinkapin Oak
(photo courtesy of NetPS Plant Finder)

Quercus gambelli, Gambel Oak
(photo courtesy of Colorado Native Plant Society)

Myth: Compost is gold, and best made in a compost bin or pile.

Many believe that there is no better friend to a gardener than compost. Others (far fewer) maintain that compost is not necessary (discussed above), and that compost bins are a waste and emit carbon into the atmosphere.

Homemade compost gives vegetable gardeners superpowers. There are true upsides to adding compost to vegetables, and other high-cost plants. So, let's separate vegetable gardening from native plant gardening.

Let's also separate annual plants from perennial plants. Annual plants, like many vegetables, deplete the soil of nutrients, whereas perennial plants feed the soil (***). So, it makes sense that non-native annual plants need at least some fertilizer and compost, whereas perennial plants should not.

Composting is easy – you put a bunch of organic matter in a pile, and after a while, there it is – pure gold. I know there are many who view composting as a scientific endeavor, with ratios of green and brown inputs, but it's really as simple as letting organic material rot. But, there is a downside. As you know if you compost, a large volume of organic matter becomes a small volume of compost. It shrinks in size, and emits - carbon and nitrogen! The very things you want in your soil, and don't want in the atmosphere. Darn – just when I thought I was doing something good, I find it contributes to climate chaos.

The other downside is that people tend to import material to make, or add to, their compost pile. Importing material has an energy impact. And, if you're buying your compost instead of making it, there's the plastic bag problem (unless buying in bulk, but then there is the energy cost of transporting).

The permaculture approach to yard waste is chop and drop, which makes more sense. Instead of creating a compost pile in a corner of your yard, you cut down your plants and leave the spent material right next to the plant. No effort involved in bringing it to a compost pile. It will do just fine right there, breaking down and adding organic material to the soil. If you're into sustainability, this is about as sustainable as it gets. It may not work well if you like a very neat and tidy yard, or in areas where you've used pea gravel as mulch. In fact, pea gravel areas should be kept free of organic debris. And, it doesn't apply to composting kitchen/food waste.

For food waste, you can have chickens who eat your waste and then free range to fertilize your yard (a true permaculture approach that is not for everyone), or you can bury your organic material under mulch, or dig a hole for it, letting the carbon and nitrogen go directly into your soil. I don't know of another option for food waste, so I have continued to compost mine in a traditional compost bin.

It also seems to be a myth that your compost pile has to be turned every so often. That apparently originated in a Rodale book, and has been perpetuated as something that must be done. As someone who does not turn her compost pile, I can tell you it does not have to be done. The bin does need air, and I manage that by adding layers to the compost pile that aerate it, such as grasses that make up a whole layer. While I do still have a compost bin (old habits die

hard), for the most part I use the chop and drop method.

Bottom line - compost is good for certain plants, and as discussed above ad nauseam, it is unnecessary for native plants with downsides that we may have failed to recognize.

And, that's a wrap on this year's edition of Garden Mythbusters!

I know some of this is controversial, and old habits die hard, but it's probably good to question the gardening authorities every once in a while. Any comments you might have on this or other "myths" are welcome!

(*) *See our article on why larval plants are important and our article on what native plants to plant to attract butterflies.*

(**) Bare-Root planting: see Kenton Seth's Colorado Native Plant design on our website for details on how to bare root plant. It is the only way to plant in Colorado!!

(***) At least, that's the permaculture view of annual versus perennial plants.

(****) Depot Park used "rainbow rock" from Ewing Landscape. It's very red when you buy it, but the red dust washes down and looks more white.

WOFR Propagation Work

by Peggy Hanson

Under the great leadership and organization of Wild Ones member, Pam Schulz, the Propagation Committee has had an amazing inaugural year. Pam has set up monthly workshops since the inception meeting in November 2021. Members have benefited from the technical guidance of member Jan Midgley and Harlequin nursery staff in learning methods of propagating native seeds. Sometimes it looks like a 6th grade science experiment in the kitchen! It's so much FUN! Despite the photo of all women here, we have several active Wild Ones' male members who just didn't make the photo shoot.

May 7th Propagation Workshop

Now that COVID restrictions have been loosened, we are thrilled to gather in person and get our hands dirty sharing experiences. It is gratifying to see that a 1.5cm seedling already has a 15cm root - just as we have heard from the experts, native plants often have many times the mass under the surface than above the surface. That increased root mass, even at a young age, allows them to survive and thrive in our dry climate.

The Propagation Committee's mission is a bit of citizen science. Through trial and error we add to our chapter's propagation database. Ultimately, we hope to empower amateur gardeners to grow those hard-to-find native species that cannot be found in the commercial nurseries. And we hope to make more native plants accessible to all.

What does committee work entail?

- Learning about various seed treatments that improve germination rates such as stratification and scarification (*) including which species need it and which ones don't.
- Trying our hand at salvaging those baby volunteers in our gardens - and learning (quickly) how very deep you need to dig to avoid damaging the roots!
- Experimenting! One committee member is trying indoor grow lights, others milk jugs and others the plastic bag method. Another experimenter is testing the germination rates between commercial seed and seeds obtained from the seed swap.
- Data! We are learning about the essentials of record-keeping to obtain good metrics on germination rates, transplant success, stratification methods, labeling methods, etc. so we can relay best techniques. Pam is a particularly organized leader and assists us by providing clear resources like seasonal sowing lists and templates taken from Jan's propagation manual.

The committee was ambitious this year. While we aren't far enough into the season to measure our propagation successes, the Committee's species spreadsheet of propagation results is becoming quite lengthy as participants' results unfold—so far 162 species were attempted!

The joy of continuous learning. We're always learning something new when we meet. For instance, did you know that members of the *Asteraceae* family cannot produce a fertile seed unless multiple SEED-GROWN plants are involved? In other words, aster plants from cuttings cannot successfully fertilize each other, nor the parent plant! So, if you have a lone aster in your yard and collect the seed, chances are those seeds will be sterile unless there is another seed-sown plant in a neighbors' yard. This is good to know before you try to germinate them! Jan typically plants 5 seed-grown plants of one species to ensure fertile seed.

Xanthisma coloradoense, Colorado Tansy Aster)

Fruits of our propagation efforts - where do all our propagated plants go?

*The Denver Plant Swap & Give Away June 12 at EarthLinks!*See the events listing above for more information and join us as a volunteer or "shopper." You needn't bring a plant to take a

plant - there will be extras. Tell your friends! This is a great way to introduce natives to a landscape without financial investment.

One of three demonstration gardens in which Wild Ones actively participates:

- Greenverein at the Turnverein in Denver (South side of 16th St, East of Clarkson)
- Depot Prairie Park in Englewood at 3001-3099 S Fox Street
- Ekar Farms at Denver Academy of Torah, 6825 E. Alameda Ave, Denver

Offerings at Wild Ones events and other events at which our chapter has a presence.

While the spring season propagation window is closing, it's never too late to try your hand. There are species to be propagated in all seasons. You may have to wait several months before you see those cotyledons appear, but the delayed gratification makes it all the sweeter.

Interested in joining the propagation committee? Please contact us at frontrangewildones@gmail.com with the subject line: "Propagation Committee." The WOFR Propagation Committee is mostly comprised of amateur member-gardeners with a passion for native plants; between Pam's organization and Jan's guidance, we can all dip our toes into the exciting world of propagation, of playing a part in helping a tiny seed germinate - a native seed that can have untold benefits to improving the ecosystem in which it is planted.

** Stratification and scarification are simply replicating nature to help a seed break dormancy. Some plants require cold temperatures for a certain time frame (stratification) like experienced in winter in the wild; some require scarification to break down the seed's hard outer shell (like the digestive juices of an animal that ingested it in the wild).*

Announcements and Acknowledgements

Native Plant Demonstration Gardens

We at Wild Ones Front Range chapter are developing a list of native plant demonstration gardens you can go see if you are interested in starting a demo garden. We'd love your help adding locations to our list. Criteria include: the garden must be a public area; it should be mostly, if not all, native plants; and, ideally, but not required, have plant labels to identify plants. If you have a garden to contribute, please contact Ayn. Put in the subject of your email " Demo garden to add to the Wild Ones' list. And, thank you!

Native Plant Sales

In addition to the seed/plants swaps mentioned above, here are some other opportunities to buy native plants.

City Park Farmers Market: Urban Roots, a small space and sustainable landscape design company, will be selling xeric and native plants at the City Park Farmer's Market, located at Denver's East High School (Colfax and Columbine), the second and fourth Saturday of the month, May 14 through October 29, 2022, 8am - 1pm. A Wild Ones volunteer may be on hand to to answer questions on planting native plants and the significance of having a native plant landscape.

High Plains Environmental Center: Place your orders on-line. For more information, please see their website.

And of course, when you shop at our local nurseries, ask for Colorado native plants!! The more we ask for 'em, the more they'll want to stock native plants.

We love to hear from you, and we are always looking for people to write articles for the newsletter. If you would like to comment on anything in this newsletter or write an article, please send your comments or ideas to FrontRangeWildOnes@gmail.com.