Tips to increase the odds your wildflower planting from seed is successful.

Wildflower plantings from seed can provide some nice benefits – one of the biggest is the support of pollinators. However, wildflower plantings require careful planning, preparation, and follow-up to be successful. (Not to mention a little help from nature in the form of precipitation if doing a dryland planting.)

Here are some tips as you think about a wildflower planting.

Before you plant

Weed control pre-planting

Weed control is critical (preferably with as much as possible before planting). Try to avoid planting into areas with large weed "seed banks" in the soil. Find out what weeds are in the area, how long they've likely been there producing seed, and how easy they are to kill. It can take over a year to get really weedy areas ready to plant. Controlling weeds amongst desirable wildflower species is very difficult in large areas.

Buying seed

Wildflower mixes often contain non-native species or highly competitive native species and may spread outside the planting area – know what you are getting. Consult your local University of Wyoming Extension, USDA-Natural Resources Conservation Service, or weed and pest or conservation district office if you have questions. Knowing how competitive the wildflowers are and expecting the number of plants of each kind to vary over the years in long-term plantings is helpful – nature is never static.

Quality wildflower seed of species native to your area can be expensive – demand often outstrips supply. You may need to place your order early to get what you want.

Consider adding some bunch grasses for bumble bee nesting habitat, weed competition, and ground cover.

Some wildflowers can be toxic to livestock if eaten (such as larkspur, for example).

Try to include a variety of species that will bloom in spring, summer, and late summer/fall to provide a long foraging season for pollinators.

Planting and germination

Fall planting is generally the preferred method (to allow for adequate precipitation – hopefully – and "cold stratification," which increases the germination of some species). However, if you live in an area with reliable late-spring moisture, then spring planting may work.

Late winter/spring moisture is critical for germination – plantings are more likely to succeed when some supplemental irrigation is possible if needed.

Find pictures of seedlings of the wildflowers so you will be able to tell friend from foe when they germinate.

Patience is a virtue with native wildflower seed – some may not germinate until two or more years have passed. Weed control can be a challenge during this period.

Transplant alternative

Consider using wildflower transplants if the area is small and you want to know exactly what you are going to get. This is usually more expensive unless you start them yourself. Small transplants may be hard to find. These plants will need care (such as adequate water) for the first couple of years.

Bite off only as much as you can chew – wildflower plantings usually involve ongoing effort. Poorly planned and maintained plantings may become a weed fest. Think twice before doing plantings in existing areas with native vegetation in reasonable shape. Instead, consider managing the area in a way that promotes native plant health. The bees will thank you for it!

For more information on wildflower plantings

"Ten Rocky Mountain native you can grow," Susan Winslow,

*Barnyards & Backyards magazine, Spring 2015 issue pgs 11-13. http://

bit.ly/rockymountainnatives

Online Appendix 1 – contains example seed mixes

APPENDIX 3

EXAMPLE SEED MIX FOR POLLINATOR PLANTINGS

The decision process for creating a pollinator seed mix can be somewhat complex. The following are some factors to consider:

- Most guidelines suggest choosing three species of flowers to bloom in each bloom period for a total of nine species. (Note: the example mix is short one late-blooming species.) There are several USDA-NRCS publications that can help you look at choices. Visit http://www.uwyo.edu/barnbackyard/resources/pollinators.html for links.
- No more that 30 percent of seed should be grasses (bunch grasses are preferred to rhizomatous since they are less likely to out-compete the flowers)
- Do you want just native plants? How "native"? Native to the U.S.? Native to the region? Native to Wyoming? Native to your county? Visit https://plants.usda.gov/ to see maps (zoom in to see your county) on each plant's page that shows whether the NRCS considers the plant to be native to the area. (These designations are not always cut-and-dried.)
- Is seed available for this plant from a seed company? (Some sources listed on http://wyomingnativegardens.org/index.php/resources/seed-sources/)
- How much will the seed cost?

This example seed mixture is calculated on a very heavy seeding rate used for broadcast application by hand. It is four times the amount of seed recommended by USDA-NRCS for use with seed drills. Calculations are based on seeding half an acre.

Plant common name	Plant scientific name	Seeds/lb	% mix	Pounds PLS needed¹	Seeds/ ft²	Example cost per pound (\$)²	Cost of seed (\$)	Seedling depth (inches)	Bloom period
Indian ricegrass	Achnatherum hymenoides	162,000	10%	1.6	11.90	12.00	19.20	1/2-3	
Bottlebrush squirreltail (grass)	Elymus elymoides	220,000	10%	1.2	12.12	14.00	16.80	1/4- 1/2	
Sandberg's Bluegrass	Poa secunda	1,000,000	10%	0.4	18.37	5.00	2.00	0-1/4	
Beeflower, Rocky Mountain	Cleome serrulata	64,000	10%	3.4	9.99	64.00	217.60	0-1/8	early-mid
Utah Sweetvetch	Hedysarum boreale	46,000	5%	2.4	5.07	150.00	360.00	1/4- 1/2	early
Penstemon, Rocky Mountain	Penstemon strictus	286,000	10%	0.8	10.51	70.00	56.00	0-1/8	early
Blanketflower	Gailardia aristata	200,000	10%	1.0	9.18	52.00	52.00	1/4- 1/2	early
Prairie clover, white	Dalea candida	448,000	10%	0.4	8.23	70.00	28.00	1/4- 1/2	mid-late
Sunflower, annual	Helianthus annuus	45,000	10%	4.8	9.92	14.00	67.20	1/4- 1/2	mid-late
Coneflower, prairie or Mexican hat	Ratibida columnifera	740,000	15%	0.9	30.58	36.00	32.40	1/4- 1/2	mid
Totals			100%	22.9	161.00		\$851.20		

¹ PLS stands for pure live seed. Read this article to gain a better understanding of what that means. http://www.uwyo.edu/barnbackyard/_files/documents/magazine/2013/fall/092013bbseedlabel.pdf

² These are just example prices to demonstrate some of the variability (though some of the more expensive ones, \$500 per pound, were not included). Seed prices can vary widely year-to-year based on supply and demand.