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WILDFLOWER MEADOWS FOR INTERIOR, ALASKA By Dr. Patricia S. Holloway and Ms. Ouina Rutledge

The newest seed catalog has a cover showing a stunning field of California poppies in full bloom. Another one shows a back yard with an explosion of wildflowers in every color of the rainbow. These pictures are an enticing advertisement for North American wildflowers that are difficult to duplicate in most regions of Alaska. Most commercial wildflower mixes contain a lot of annuals that will not reseed in our short season and perennials that are not hardy here. A very common occurrence is for the colorful flowers to disappear after one or two years leaving a few hardy flowers such as yarrow and ox-eye daisies to take over. These wildflowers are nice if you like the color white! Some wildflower mixes from not-so-reputable seed companies contain weed seeds that have never been seen before in Alaska. Many give the false impression that gardeners can throw a few seeds out into their back yard and expect an instant bonanza of color.

Most of the wildflower mixes do not duplicate natural wildflower meadows, but are meant to be an ornamental, season-long displays of color. Natural meadows are complex ecosystems that include a wide variety of grasses and a handful of well-adapted native wildflowers. Certain wildflowers such as fireweed or wild iris will dominate in some meadows depending on site conditions. The commercial mixes contain few, if any grasses, and wildflowers are dense. The effect on the cover of most seed catalogs cannot be duplicated by throwing the seed mix out the back door into a field. It requires repeated tillage to remove competing weeds and woody plants before sowing, irrigation in dry springs, and renovation every 2-3 years.

Another challenge for Alaska gardeners interested in starting a wildflower meadow is the limited availability of true Alaska wildflower seeds. The commercial wildflower businesses in Alaska do not market bulk packages of native wildflower seeds for large meadows. Seeds often are collected from the wild, making seed prices very high. Many Alaska wildflowers also have complex seed germination requirements that prevent germination for one or more years.

So what's an Alaska gardener to do? The commercial wildflower mixes are not reliably hardy, and Alaska wildflowers are available only in small quantities. The logical answer is to combine them. Purchase a commercial wildflower mix with the understanding that the brilliant colors will last only a few years. Plan to renovate and replant at least every three years to keep the brilliant colors. OR, supplement the nonnative wildflower mixes with as many Alaska wildflowers as possible. As the nonnative wildflowers die out, the Alaska wildflowers should become established, thus extending the life of your wildflower meadow. If Alaska wildflowers are added, do not sow the commercial mixes as thickly as recommended on the package in order to prevent the Alaska wildflowers from being out competed by more aggressive ones. Sow seeds in the fall (mid to late September in Fairbanks) for best germination and wildflower establishment. Collect or purchase as many Alaska wildflower seeds as possible (see recommended list on the next page); combine with the nonnative mixes; and sow together. Use the tables on the back to choose a commercial wildflower mix with the best combination of wildflowers for the Interior.

Non-native wildflowers that should survive or self sow for more than one season. Most eventually die out over time:

Alyssum (Alyssum maritimum)

Baby blue-eyes (Nemophila menziesii)

Baby's breath (Gypsophila muralis)

Black-eyed Susan (Rudbeckia hirta)

California poppy, annual (Eschscholzia californica)- only if fall sown

Chinese forget-me-not (Cynoglossum amabile)

Dame's Rocket, biennial (Hesperis matronalis)

Icelandic poppy, annual (*Papaver nudicaule*)-best if fall sown

Ox-eye daisies (Chrysanthemum leucanthemum)

Pot Marigold, annual (Calendula officinalis)

 $Rocky\,Mountain\,Penstemon\,(Penstemon\,strictus)$

Sneezeweed (Achillea ptarmica) (Chrysanthemum coronarium)

Recommended Alaska native plants for meadows

Arctic Lupine (Lupinus arcticus)

Arnica (Arnica alpina)

(Arnica latifolia)

(Arnica lessengii)

Beautiful Jacob's ladder (Polemonium

pulcherrimum)

Bedstraw (Galium boreale)

Blue flax (Linum perenne)

Eskimo potato (Hedysarum alpinum)

Fleabane (Erigeron glabellus)

Fireweed (Epilobium angustifolium)- may take over some areas

Glaucous bluegrass (Poa glauca)

Goldenrod (Solidago multiradiata)

Great burnet (Sangusorba officinalis)

Harlequin flower (Corydalis sempervirens)

More Alaska native plants:

Jacob's ladder (Polemonium acutiflorum)

Nootka lupine (Lupinus nootkatensis)

Siberian aster (Aster sibiricus)

Strawberry spinach (Chenopodium capitatum)

Wild chamomile (Tripleurospermum inororatum)

Wild iris (Iris setosa)

Wild larkspur (Delphinium glaucum)

Wild sweet pea (Hedysarum mackenzii)

Yarrow (Achillea borealis)

Yarrow (Achillea millefolium)

Yellow hawkweed (Hieracium scabriusculum)

Yellow oxytrope (Oxytropis campestris)

Non-native wildflowers in mixes that normally will not re-seed or grow for more than one season:

Alyssum Alyssum saxatile

Columbine (Aquilegia spp.)

Corn poppy (Papaver rhoeas)

Cornflower (Centaurea cyaneus)

Evening Primrose (Oenothera lamarckiana)

Globe gilia (Gilia capitatum)

Godetia (Godetia amoena)

Maltese cross (Lycnis chalcedonica)

Scarlet Flax (Linum rubrum)

Siberian wallflower (Cheiranthus allionnii)

Tansy bluebells (Phacelia tanacetifolia)

Plants to avoid (too aggressive)

All spreading grasses such as:

Brome grass (Bromus inermis)

Bluegrass (Poapratensis)

Red fescue (Festuca rubra)

Alsike clover (Trifolium hybridum)

Butter n' eggs, wild snapdragon (Linaria vulgaris)

White clover (Trifolium repens)