

Technical Bulletin



Intermediate Ht. Wildflower Mixture

United Seeds' Intermediate Ht. Wildflower Mixture is comprised of wildflowers that will reach a maximum height of three feet or less. The species in the mixture are will be blend well with lower growing native grass species or even as 100% wildflower habitat. Pollinators will love this mixture as well.

BOTANICAL NAME	COMMON NAME	PERCENT OF MIX	<u>TYPE</u>	<u>HEIGHT</u>	BLOOM PERIOD	BLOOM COLOR
ASCLEPIAS TUBEROSA	BUTTERFLY MILKWEED	7.5%	PERENNIAL	18-30"	SUMMER	ORANGE
CHRYSANTHEMUM MAXIMUM	SHASTA DAISY	5.0%	PERENNIAL	18-30"	SUMMER	WHITE
COREOPSIS LANCEOLATA	LANCELEAF COREOPSIS	10.0%	PERENNIAL	18-36"	SUMMER-FALL	YELLOW
COREOPSIS TINCTORIA	PLAINS COREOPSIS	2.5%	ANNUAL	16-36"	SUMMER	YELLOW / RED
ECHINACEA ANGUSTIFOLIA	BLACK SAMSON	5.0%	PERENNIAL	12-24"	SUMMER	VIOLET
ECHINACEA PURPUREA	PURPLE CONEFLOWER	12.5%	PERENNIAL	24-36"	SUMMER	PURPLE
GALLARDIA ARISTATA	BLANKETFLOWER	5.0%	PERENNIAL	18-30"	SUMMER	YELLOW-RED
GALLARDIA PUCHELLA	INDIAN BLANKETFLOWER	5.0%	ANNUAL	12-24"	SUMMER	YELLOW-RED
LIATRIS PUNCTATA	DOTTED GAYFEATHER	2.5%	PERENNIAL	10-16"	SUMMER-FALL	PURPLE
LINUM PERENNE	BLUE FLAX	0.05	ANNUAL	24-36"	SPRING-SUMMER	BLUE
LUPINUS PERENNIS	PERENNIAL LUPINE	5.0%	PERENNIAL	12-36"	SPRING-SUMMER	BLUE
MONARDA CITRIODORA	LEMON MINT	5.0%	PERENNIAL	12-24"	SPRING-SUMMER	LAVENDER-WHITE
PENSTEMON GRANDIFLORUS	SHELL LEAF PENSTEMON	2.5%	PERENNIAL	24-36"	SPRING-SUMMER	PINK-LAVENDER
RATIBIDA COLUMNIFERA	UPRIGHT CONEFLOWER	7.5%	PERENNIAL	12-36"	SUMMER	YELLOW
RATIBIDA COLUMNIFERA	MEXICAN HAT	10.0%	PERENNIAL	12-36"	SUMMER	YELLOW-RED
RUDBECKIA HIRTA	BLACKEYED SUSAN	5.0%	PERENNIAL	12-36"	SUMMER-FALL	YELLOW
SOLIDAGO NEMORALIS	DWARF GOLDENROD	2.5%	PERENNIAL	12-24"	SUMMER-FALL	YELLOW
VERBENA STRICTA	HOARY VERVAIN	2.5%	PERENNIAL	24-36"	SUMMER	PURPLE

Type – A = Annual Seeding Rate – 16 to 32 Lbs/Acre

P = Perennial B = Biannual (1/2 to 1 Lb/1,350 Sq. Ft.



Brady Bloomquist: 641-895-2305 <u>brady.bloomquist@hmgiowa.com</u>

hmgiowa.com

ESTABLISHMENT AND MAINTENANCE



ESTABLISHMENT

Native wildflowers can be established from a number of effective methods. Regardless of the method however, the rate of establishment is directly related to amount of seed-to-soil contact that is achieved. Most native wildflower seeds have a natural dormancy that must be broken in order to germinate. Seed-to-soil contact is one way to break dormancy with the scratching of the seed coat. Once this takes place, then water can be absorbed and thus begin the germination process.

Native wildflowers can be inter-seeded into existing vegetation, drill seeded, broadcast seeded or frost seeded. Again, regardless of the method, finding a way to get the seed into the soil, past any dead (or living) vegetative matter and into the soil is crucial.

For inter-seeding into existing (living) vegetation, a "no-till" mechanical drill is best. The drill can cut past the vegetative matter and place the seed into the soil and pack the soil to achieve good seed-to-soil contact. This method disturbs the existing soil the least amount, thus not disturbing as many weed seeds. If a drill is not an option, then wildflower seed can be broadcast into existing vegetation and worked in lightly to disturb the soil and cover the seed. This can be done with a disk harrow or spike harrow with the spikes turned the opposite direction of the travel path. Although weed seeds will be disturbed and be a potential problem, existing vegetation will be only minimally affected yet still provide "cover" for the young wildflower seedlings. Inter-seeding into an existing native grass stand is the perfect way to add separation for the wildflowers and give that "natural" appearance.

Seeding into bare ground follows much the same premise. Drill seeding is best, broadcast seeding will work fine if the seed can be covered with no more than a 1/4 of soil. Covering the seeded area with straw or mulch will help to retain soil moisture.

Another highly effective seeding method is dormant (frost) seeding. This is done when the ground is either frozen with or without snow cover or just when the ground is too cold to facilitate germination. It can be seeded by using a mechanical drill, or broadcasting. Much like in established native settings, wildflower seeds will be dispersed by wind or birds, and once the freeze/thaw cycle is complete in the spring, the seeds have gone through a physiological stage that breaks dormancy.

Weeds will be an issue. The more the soil is disturbed, the more the weeds will become a problem. Controlling weeds before they produce seed will shorten the amount of time that the wildflower stand will eventually take over. If the area is large, hand weeding may not be the most viable option, so mowing the weeds may be the only option. With no commercially available herbicides for post-emergence weed control. Weed control during establishment will be the biggest challenge. For larger areas, this can be somewhat alleviated by seeding the wildflowers with native grasses. Weed control becomes easier when the wildflowers become well rooted and are not easily pulled out with the weeds.

MAINTENANCE The whole idea behind the Native Wildflower mix is low maintenance. Once established, the wildflowers will reseed themselves, further thickening the stand. Fertilizer is not generally needed unless is the soils are deficient; Water is generally not needed, although in exceptionally dry weather to prevent death watering is recommended. The wildflower stand can be mowed down in the spring to help encourage new growth and distribute seeds. Weeding may be needed, but as time goes by, the wildflower stand will thicken and increase.

OTHER CONSIDERATIONS Creating a native setting cannot be mimicked in one, or even two years. Above all else, patience is the biggest factor in creating native wildflower (and native grass) habitat that looks like the real thing. To help "speed-up" the establishment we would encourage incorporating native grasses within the area as well. Native grasses add separation to the wildflowers, which add to the authentic native look, as well as helping to control weeds and retain moisture. A suggested course of action would be to establish the native grasses first, then two to three years down the road, incorporate any wildflowers you wish to establish.

> Brady Bloomquist: 641-895-2305 brady.bloomquist@hmqiowa.com