



# Planting Date Guidance for Restoration & BMP Projects

9-14-12

## Seeding - Recommended Dates/Vegetation Type

Seed Type	Spring/Early Summer	Mid-Summer	Early Fall	Mid-Fall	Late Fall (Dormant Seeding)	Snow Seeding
	(see date below)	Jun 30 - Aug 1	Aug 1 - Sep 10	Sep 10 - Oct 15	North: Oct 15 - Frozen Soil South: Nov 1 - Frozen Soil	Feb 15 - April 7
Cool-season Prairie	Apr 1 - Jun 15	**		*		
Warm-season Prairie	May 15 - Jun 30		*	*		
Prairie Sedges and Forbs	May 15 - Jun 30		*	*		
Wetland Grasses	Apr 1 - Jun 30	**		*		
Wetland Sedges and Forbs	Apr 1 - Jun 30	**		*		
State Native Construction Mix	Apr 1 - Jun 30		*	*		
Oats Cover	Apr 1 - Jun 30			*	*	*
Winter Wheat Cover	**	*			*	*

## Plant Installation - Recommended Dates/Vegetation Type

Plant Type	Early Spring	Late Spring	Mid-Summer	Early Fall	Mid-Fall	Late Fall (Dormant Planting)
	Green-up- May 15	May 15 - June 30	Jun 30 - Aug 1	Aug 1 - Sep 10	Sep 10 - Oct 15	North: Oct 15 - Frozen Soil South: Nov 1 - Frozen Soil
Bare-root Herbaceous			*	**	**	
Bare Root Woody			*	**	**	
Containerized Prairie				*	*	*
Containerized Wet Meadow				*	*	*
Containerized Marsh				*	*	*
Containerized Woody					*	
Submergent Plant Fragments				*	*	**
Vegetated Mats				*	**	**
Woody Cuttings			**	**	*	

### Expected Success Rates:

High Success
Medium Success
Not Recommended Without Watering or Favorable Weather Conditions
*Low Success
** Not Recommended

**Note:** Many projects will have NRCS, Mn/DOT, or other specifications that will define planting dates. Variance can often be granted due to seasonal conditions.

Dates included in the tables above represent average dates for Minnesota. Planting dates may be one to two weeks later in the northern half of the state and one to two weeks earlier in southern half of the state depending on seasonal conditions. Most seed mixes contain combinations of the vegetation types listed in the table; dates should be chosen that will ensure long-term success of the entire seed mix. Local staff should use their judgement about the most appropriate planting dates.

## Seeding Considerations

**Spring/Summer Seeding:** Spring and summer tends to be the best season for grass establishment and forbs such as pasque flower, prairie smoke, phlox, shooting star, golden alexanders, gentian, meadow rue, and many violets that do not require stratification. Forbs and sedges that require a winter for stratification tend to do better with fall planting but when planted in the spring they can sit dormant for a season until they are ready to germinate.

**Fall Dormant Seeding:** It is common to wait until around October 15th or possibly November 1st in the southern part of the state when dormant seeding. It is important that conditions will be cold enough to prevent germination right before winter. It is also common to wait until shortly before snowfall to prevent the loss of seed from wind, birds and rodents. Fall dormant seeding is commonly done when forbs and sedges are a primary goal for a project. Fall dormant seeding and winter seeding typically should not be conducted in areas where there will be flowing or standing water in the spring as seed may be lost.

**Snow Seeding:** Snow seeding is conducted during late winter when there is less than a foot of snow, and on sunny days when seed can move to the soil surface. This technique has been successful for a wide variety of species types. Refer to the Minnesota Wetland Restoration Guide for more information about snow seeding.

**Cover Crop Use:** Cover crop species are included in state seed mixes. Oats (*Avena sativa*) should be used in spring or summer, and winter wheat (*Triticum aestivum*) in fall. If a project is focused on stabilization and slopes are between 5-10%, cover species should be increased by 35 pounds per acre. If slopes are more than 10% cover species should be increased to 56 pounds per acre.

## Plant Installation Considerations:

**Plant Condition:** the planting dates listed in the table assume that containerized plants are fully rooted into containers, that pre-vegetated mats have established vegetation, and that herbaceous, and woody bare root plants (and cuttings) are stored in optimal conditions prior to planting.

**Weather Conditions:** Weather conditions (including rainfall and temperatures) during a season can have a big influence on the ideal planting dates for vegetation. Planting dates may need to be adjusted based on past and projected conditions.