

Tip Sheets

Dormant Seeding

Mid to late August is the optimal time to seed cool-season turf grasses throughout much of the northern half of the United States because soil and air temperatures tend to be moderate, falling into the zone where maximum germination can occur. The optimum air temperature is 60-85°F, depending on the species. Spring seeding is usually recommended as the second best time to seed. However, to avoid the potential problems of seeding too late in the spring, dormant seeding has distinct advantages.

So, what is "dormant seeding?" Dormant seeding is the distribution of seeds during a period outside the normal growing season, so that the seeds will be in place and ready to germinate when conditions allow. Ideally, the weather is persistently cold, to prevent premature germination. Snow cover is also beneficial, because it keeps the seed moist. In Ohio, dormant seeding is done by seeding into a prepared soil after soil temperatures have cooled below 40°F so the seed will not germinate until spring.

Research on dormant seeding practices has revealed the following:

- Soils are generally drier and easier to work in fall than in spring, especially native soils (silt clay loams).
- The seed is in place to take full advantage of warming soil temperatures next spring.
- Dormant seeding requires less irrigation than spring or summer seeding. However, seeds will dry out if there is no winter precipitation at all.
- Dormant seeding requires less robust weed and disease control strategies
- Dormant seed can emerge up to 15 days earlier than conventional spring-seed.
- Disadvantages of dormant seeding:
 - o Dormant seeding would most likely not be as successful as an early fall planting.
 - A spring warm-up could initiate germination only to be followed by an extreme cold period, which could kill the seedlings.
 - Situations in which dormant seeding fail include areas of soil erosion and the use of dark colored mulches, which raise surface temperatures.
 - Increased seed application rates (30-50%) are recommended because seed mortality rate is higher in dormant seeding.

Remember, the success of dormant seeding is heavily influenced by the winter weather. Mild and changeable winters would not be as ideal as a snow cover and persistently cold winter. The decision to go with a dormant seeding is one that needs careful forethought and investigation.