Late summer and early fall (August 20th through October 15th) is the ideal time in Maryland for the establishment of cool season grasses such as tall fescue, Kentucky bluegrass, and fine fescue. If you cannot irrigate, or if water restrictions are in effect, seeding between September 15th and October 15th may be preferable to take advantage of cooler temperatures and greater likelihood of rainfall.

Seeding later than October 15th presents problems with the winter survival of turfgrass seedlings and with competition from winter annual broadleaf weeds. Seeding in the spring can present problems with competition from summer annual grass weeds such as crabgrass, and reduced survival of young turfgrass plants when summer heat and drought begins.

Although many people seed at the proper time, put much effort into proper soil preparation, and have selected quality seed, some still find that the end product is not what they anticipated. Often, this failure is due to the initial lack of proper care after the seed has been sown.

Proper care during the first two months after seeding is essential to obtain a healthy, dense stand of turfgrass that is resistant to weed encroachment and other problems. Most of the necessary steps are based on common sense but are often overlooked by homeowners. By following a few basic guidelines, however, the chances for establishing an attractive lawn with reduced pest problems will be greatly increased.

Irrigation

One of the most critical factors for successful establishment of new turfgrass seedings is maintaining adequate soil moisture until the grass is well established. Without moisture, germination and early seedling survival will be poor and may result in complete failure of the grass. The root system of young seedlings is shallow and poorly developed. Thus, maintaining moisture in the upper inch of the soil is especially important.

The most likely times of the year to experience problems with excessive drying of the soil surface are late spring and summer. Keep in mind, however, that although rainfall and desirable temperatures are less of a problem in the fall and in early to mid spring, soil can still easily dry out during these times of the year. The conditions that favor rapid drying of the soil surface include windy days, low humidity, high temperatures, sandy soils that retain little moisture, and compacted soils that inhibit infiltration of water into the soil. A combination of these factors can result in rapid turf loss due to drought.

The soil surface should be kept moist from the time of seeding until several weeks after the seed has germinated. When conditions favor rapid drying (see above), several light waterings (1/16 to 1/4 inch of water) per day may be needed to keep seedlings that have just emerged from drying.
As the seedlings develop and their root systems increase, the surface may be allowed to dry out, but the root zone must still be kept moist. This may mean less frequent but somewhat more intensive irrigation. As the turf stand continues to develop to the point when mowing is required, the necessity for irrigation continues to decrease. The soil at this point should be firm enough to allow the use of a mower without its sinking into the turf. If the soil is too wet when the new turfgrass stand is first mowed, ruts may create or grass plants may be pulled out.

Care must also be taken to not stop watering turfgrass mixtures too soon. Species that are quick to germinate and grow rapidly, such as perennial ryegrass and tall fescue, will establish quickly. Thus, the need for watering may be reduced at an earlier date than for slower germinating and growing grasses, such as Kentucky bluegrass. Seed is often sold that contains several species of grass, and such mixtures often contain both quickly and slowly establishing species. Care must be taken to maintain adequate moisture until the slower growing grass is established.

For areas where irrigation is impractical or impossible, it is essential that a good weed-free mulch be used to reduce loss of soil moisture. Even with a mulch, however, the loss of some seeding turf should be expected during adverse environmental conditions if no water is applied. A subsequent overseeding of thin areas may be necessary.

Although it is less often a cause of failure, excess water from either rainfall or irrigation can also lead to problems. The most common effects of overwatering are soil erosion, ponding of water which leads to suffocation or scalding of young grass, and disease problems in the late spring or summer months.

Avoid watering past the point at which water starts to pond or to run off the site. This point will occur sooner on clay soils and compacted soils. Also, in the late spring and the summer, avoid watering at night. Several seedling diseases that can kill entire stands of young grass are substantially worse when leaf blades remain wet throughout the night.

**Fertilization**

Soil tests should have been obtained from a local county extension office prior to seeding so that the proper amounts of limestone and fertilizer were applied to the seedbed. If the recommendations were followed, no additional fertilizer should be needed for 45 to 60 days after seeding. However, if no fertilizer was applied during seeding, apply 10 pounds of a 10-10-10 fertilizer per 1000 square feet, wait 45 to 60 days, and then follow recommendations in the Home Garden Information Center Fact Sheet 702.

**Mowing**

Poor mowing practices are a primary cause for the decline of home lawns, and proper mowing is just as important for a young lawn as for an established lawn. The basic practices are virtually the same:

~ Be sure to use a mower with a sharp blade so that sensitive seedlings are not shredded or pulled out.

~ Do not mow when the air temperature is over 90° F or if the soil is not firm enough to support you and the mower.

~ Mow the new grass when it is about 0.75 inches taller than the height you cut your lawn (if the mower is set at 2.5 inches, mow before the grass gets to 3.25 inches).

~ Do not mow the grass too short. Grasses such as tall fescue, fine fescue, and Kentucky bluegrass should be mowed no lower than 2 inches (preferably 2.5 - 3 inches).

~ Low mowing heights will allow many weeds to get a foothold in a young grass stand.

**Weed Control**

Weed control in newly seeded turf may be necessary if competition is severe. Under some conditions, weeds are so aggressive that the grass never has a chance to get established. Weeds are more likely to be a problem in spring seedings and mid to late fall seedings. If weeds are so extensive that hand pulling is not practical, the use of a herbicide may be warranted.

Generally, it is best to apply broadleaf weed herbicides after turf has been mowed 2 or 3 times. Control of annual grasses (crabgrass and goosegrass) is more difficult because most preemergence annual grass herbicides cannot be applied until young turf is well rooted and has been mowed at least 4 times.

Since herbicide labels change frequently, it is best to consult the following weed control publications for information on products that may be used on new lawns:

Univ. of Md. Agronomy Mimeo 79 ‘Broadleaf Weed Control in Established Lawns’ and Univ. of Md. Agronomy Mimeo 85 ‘Herbicides for Crabgrass and Goosegrass Control in Turf’. 

---

The University of Maryland is equal opportunity. The University’s policies, programs and activities are in conformance with pertinent Federal and State laws and regulations on nondiscrimination regarding race, color, religion, age, national origin, sex, and disability. Inquiries regarding compliance with Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Educational Amendments; Section 504 of the Rehabilitation Act of 1973; and the Americans With Disabilities Act of 1990; or related legal requirements should be directed to the Director of Personnel/Human Relations, Office of the Dean, College of Agriculture and Natural Resources, Symons Hall, College Park, MD 20742.