**Growing A Great Lawn**

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### Soil Preparation

- **Soil sampling**  
  - sample upper 4-6 inches of soil if establishing a new lawn.  
  - upper 3” of soil for established turf (remove thatch).  
  - 15 to 20 random cores from each area to be tested.

- **Soil test.**  
  - Incorporate nutrients 4-6 inches below soil surface.

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### Soil Preparation

- **Incorporate nutrients 4-6 inches below soil surface.**

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### Turfgrass Establishment

- **Apply 1 lb. P/1000 sq. ft. to promote root establishment.**
- **Keep the seedbed moist. Don't apply too much or too little water.**
- **Mow as soon as clippings can be returned to the turf.**

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### Species Selection

**Cool season grasses:**
- Kentucky bluegrass  
  - Bristol  
  - Glade  
  - Kenblue  
  - Park  
- Fine fescue  
  - Navigator  
  - Jamestown  
  - Boreal  
  - Lustrous  
  - Cindy Lou  
- Tall fescue  
  - Bonanza

**Warm season grasses:**
- **Buffalograss**  
  - Legacy  
  - Bowie  
  - Cody  
  - Bismark Ecotype  
- **Bluegrama**  
  - Bad River Ecotype  
- **Zoysia grass which is promoted heavily for our region is not recommended!**
NATIONAL TURFGRASS EVALUATION PROGRAM

www.ntep.org

…to select the proper turfgrass cultivars for use in your region

Use Proper Seeding Rates

- Kentucky blue – 1-2 lbs./1000 sq. ft.
- Fine fescue – 3.5-4.5 lbs./1000 sq. ft.
- Tall fescue – 7-9 lbs./1000 sq. ft.
- Creeping bentgrass – 0.25-1 lb./1000 sq. ft.
- Buffalograss – 1-2 lbs./1000 sq. ft.
- Bluegrama – 2-3 lbs./1000 sq. ft.

Use Proper Seeding Rates

Advantages of exceeding the prescribed seeding rate:
- Quick green up

Disadvantages of exceeding the prescribed seeding rate:
- Competition for water and nutrients below ground - resulting in seedling stress.
- Competition for sunlight above ground - resulting in seedling stress.
- Dense growth restricts airflow through the canopy which increases chances for disease.
- Seedlings are likely to enter winter months in an immature state.
- Waste of money.

Seedbed preparation

Must establish seed to soil contact

Verticutter

Seedbed Preparation

Verticutting
Weed Suppression

Herbicides that can be used to suppress weeds in spring-seeded turf:

- Preemergence weed control: Cool-season grasses and zoysia: Tupsersan (siduron)
- Postemergence in any seedbed: Drive (quinclorac)

Spreading the Seed

- Drop spreader
- Broadcast spreader
- Seed mats

Timing of Seeding

- Cool-season grasses: Autumn preferred; spring a distant 2nd; dormant seeding possible
- Warm-season grasses: Spring

Winter/Dormant Seeding/Overseeding

When dormant seeding, add an additional 20% to the seeding rate to compensate for seed loss due to:

- washout
- wind scattering
- birds, voles, etc.
- seed rot
- etc.
Overseeding

The term overseeding also applies to seeding into an existing canopy (usually at half rate) to rejuvenate the lawn; a practice that can be used in all regions of the United States.

How to Tell if You Watered Enough

- Use catch cans
- Use a screwdriver; moisture down 6-8 inches

Watering

- Look for darker “hot spots”. Often have a purplish tinge.
- Best to allow turf to undergo some stress early in the season. Makes turf more drought resistant.
- Attempt to apply ¾ to 1 inch of water each time you irrigate.

Proper Watering

- Shallow, Frequent
- Deep, Infrequent

- If indicated by soil test, amend with P, K; adjust pH BEFORE planting
Kentucky bluegrass in North Dakota:
- High quality: 4 to 5 lbs. N/1,000 sq. ft./yr
- Med. Quality: 2 to 3 lbs. N/1,000 sq. ft./yr
- Low quality: 0 to 1 lb. N/1,000 sq. ft./yr

- Soil texture
- Rainfall and irrigation
- Clippings management
- Intensity of use

Fertilizer Timing for Cool-Season Turf in the Fargo Area

- Memorial Day
- Fourth of July
- Labor Day

Fertilizing Cool-Season Grasses in North Dakota

Fall fertilization is generally recommended for cool-season grasses, because it:
- Stimulates root growth instead of top growth.
- Increases turf density when weed competition is minimal.
- Maintains turf color longer into the fall, and hastens spring green up.
- Results in better plant health because the plant accumulates carbohydrates.

<table>
<thead>
<tr>
<th>Number of Fert.</th>
<th>Time</th>
<th>Amt. per 1000 sq. ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once a year</td>
<td>Early September</td>
<td>1.0 to 1.5</td>
</tr>
<tr>
<td>Twice a year</td>
<td>Early July and early September</td>
<td>1.0 to 1.5</td>
</tr>
<tr>
<td>Three times per year</td>
<td>Late May, early July and early September</td>
<td>1.0 to 1.5</td>
</tr>
</tbody>
</table>