turf growing manual
table of contents

EarthCarpet® -
The Science is in the Seed.................. 1

Making the Sale -The EarthCarpet®
Product Family ............................ 5

Fertilizer 101 -
Choosing the Right Fertilizer ..........20

Getting the Customer
Off on the Right Foot ................. 27

Diagnosing Turf Problems and
Identifying Common Weeds .......... 33
Welcome to the EarthCarpet® Turf-Growing Manual

Everything you ever wanted to know about growing lush, green turf (and growing your business)

WHEN YOU HAVE A REPUTATION FOR HELPING CUSTOMERS SOLVE PROBLEMS, YOU HAVE LOYAL CUSTOMERS WHO RETURN OFTEN AND REFER YOU TO OTHERS.

THIS EARTHCARPET® MANUAL SHOWS YOU NOT ONLY HOW TO SOLVE CUSTOMERS’ TURF PROBLEMS, BUT HOW TO POSITION YOURSELF AS THE LOCAL TURF-GROWING EXPERT. WE RECOMMEND THAT YOU READ THIS MANUAL THOROUGHLY AND REFER TO IT OFTEN.

EARTHCARPET® OFFERS OVER A DOZEN UNIQUE SEED MIXTURES. THIS MANUAL WILL SHOW YOU HOW TO MATCH THE RIGHT SEED TO THE RIGHT CUSTOMER, STARTING FROM THE MOMENT THEY WALK THROUGH YOUR DOOR.

BUT FIRST, IT’S IMPORTANT TO UNDERSTAND WHY THE OLD SEEDS YOU’VE BEEN SELLING ALL THESE YEARS AREN’T GIVING YOUR CUSTOMERS THE RESULTS THEY’RE LOOKING FOR.
EarthCarpet®
The Science is in the Seed™

Trying to grow lush, green turf with the “wrong” seeds is like trying to grow an apple tree from a pumpkin seed—no amount of watering, fertilizing or re-seeding will give you the results you’re looking for. That’s why, at EarthCarpet®, we’ve taken a revolutionary approach. We’ve spent years cultivating the right seeds for the right conditions.

Do you have a customer who needs:

- Turf that’s drought tolerant?
- Dense, resilient grass that greens up early for a soccer field?
- No-mow turf for a difficult-to-mow area?

Whatever the challenge, EarthCarpet® makes a seed mix that will not only transform that lawn, but will also save your customer money on fertilizer, watering, pest control and excessive mowing. Once your customers choose EarthCarpet®, they’ll sweat less and enjoy their lawns more. Guaranteed.

And they’ll have you to thank for it.

Old Common Seed

Same old seeds, same old disappointing results.

If you take a long, hard look at some of our competitors, you’ll notice they’re still peddling the same seed mixes they’ve been selling for 50 years:

- Common Kentucky bluegrass, perennial ryegrass, fine fescue and tall fescue.
- Old seed varieties that were once popular but are now considered the same as commons, including Park or 98/85 kentucky bluegrass, Linn perennial ryegrass and Kentucky 31 tall fescue.

Sadly, year after year, the customers who buy these seeds are confronted with the same old headaches:

- No disease resistance—red thread, dollar spot, rust, necrotic ring spot, brown patch and others are par for the course
- No insect resistance—sod webworm, cutworms, billbugs and chinch bugs rear their ugly heads
- No drought or heat stress tolerance
- No wear-and-tear tolerance—impractical for athletic events or backyard soccer games
The Hidden Costs of Using “Cheap” Common Seed

If all you’re looking at is price per bag, common grass seed looks like a bargain compared to EarthCarpet®. However, common seed requires more labor and management:

- more fertilizer
- more fungicide
- more water
- more herbicide
- more insecticide
- more reseeding

YOUR CUSTOMERS DESERVE BETTER!

EARTHCARPET® VERSUS COMMON SEED
COST COMPARISON FOR ONE COMPLETE SEASON (SEEDING YEAR)
(These Costs are Approximate, Based on an 10,000 Sq. Ft. Lawn)

<table>
<thead>
<tr>
<th>Real Cost of Common Seed</th>
<th>EarthCarpet® Seed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step</strong></td>
<td><strong>Total</strong></td>
</tr>
<tr>
<td>Initial Seeding (40 lbs @ $2.25/lb)</td>
<td>$90.00</td>
</tr>
<tr>
<td>Starter Fertilizer Application (40 lbs @ $.72/lb)</td>
<td>$28.80</td>
</tr>
<tr>
<td>Second Fertilizer Application (42 lbs @ $.65/lb)</td>
<td>$27.30</td>
</tr>
<tr>
<td>Third Fertilizer Application (42 lbs @ $.65/lb)</td>
<td>$27.30</td>
</tr>
<tr>
<td>Extra Water (because grass isn't drought tolerant)</td>
<td>$12.00</td>
</tr>
<tr>
<td>Insecticide</td>
<td>$36.00</td>
</tr>
<tr>
<td>Fungicide</td>
<td>$29.00</td>
</tr>
<tr>
<td>Weed &amp; Feed Application in the Fall (or herbicide)</td>
<td>$34.83</td>
</tr>
<tr>
<td>Reseeding (20 lbs @ $2.25/lb)</td>
<td>$45.00</td>
</tr>
<tr>
<td>Fertilizer for Reseeding (40 lbs @ $.72/lb)</td>
<td>$28.80</td>
</tr>
<tr>
<td><strong>Season Total</strong></td>
<td><strong>$359.03</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EarthCarpet® Seed</th>
<th><strong>Total</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Seeding (40 lbs @ $3.15/lb)</td>
<td>$126.00</td>
</tr>
<tr>
<td>Starter Fertilizer Application (40 lbs @ $.72/lb)</td>
<td>$28.80</td>
</tr>
<tr>
<td>Second Fertilizer Application (42 lbs @ $.65/lb)</td>
<td>$27.30</td>
</tr>
<tr>
<td>Weed &amp; Feed Application in the Fall (or herbicide)</td>
<td>$34.83</td>
</tr>
<tr>
<td><strong>Season Total</strong></td>
<td><strong>$216.93</strong></td>
</tr>
</tbody>
</table>

A BAG OF COMMON SEED MAY BE CHEAPER, BUT IT’S NO BARGAIN. WHEN CUSTOMERS SWITCH TO EARTHCARPET®, TWO THINGS HAPPEN: TURF QUALITY GOES UP – COSTS AND LABOR GO DOWN.
EarthCarpet®

Innovative seed combinations mean better quality, less work, lower maintenance costs.

The quality of an EarthCarpet® lawn can be measured by four factors:

- Fewer dead patches and spots
- Less stress and worry
- Customers who take more pride in their lawns and landscaping
- Curb appeal that may actually add value to their homes

The joys of owning an EarthCarpet® lawn are obvious:

- Over the three-to-five-year life cycle of the lawn, a customer can expect significant cost savings
- Lawn maintenance is greatly simplified
- Your customer spends less time pushing spreaders, raking, de-thatching, seeding and spraying

Who knew it could be this easy? And the results are guaranteed.

With EarthCarpet®, You Won’t Just Make Money, You’ll Make Loyal Friends

Isn’t it great when a product performs so well that you actually look forward to introducing it to your best customers? EarthCarpet® is just such a product. And once customers see the amazing results they get, don’t be surprised if they come back to buy more products from their new “turf guru.”

GROWING LUSH, GREEN TURF JUST GOT EASIER.
AND THE RESULTS ARE GUARANTEED WITH EARTHCARPET®.
Making the Sale

Ben Franklin used to say, “The definition of insanity is doing the same thing over and over again and expecting different results.” Yet homeowners make the same, basic lawn mistake year after year—they start with the wrong grass seed.

This year, you can put an end to their cycle of frustration. You can match the right seed to the right conditions by asking a few simple questions.

4 big questions to ask when a turf customer walks through your door:

1. How will the turf be used?
   (Ornamental lawn? Play area? Athletic field?)

2. How would you describe your current growing/mowing conditions?
   (Poor drainage? Hilly? Sunny/shady? Current irrigation scenario? Loose/compacted soil?)

3. What, if any, problems have you experienced in the past with this lawn?
   (Bare spots? Brown turf? Pests?)

4. Have you performed a soil analysis?

The secret to curb appeal? Grass with a pedigree.

Each tiny grass seed contains DNA with its own genetic code for certain traits like disease resistance, wear or drought tolerance, dark green color, fine leaf texture, etc. EarthCarpet® carefully blends these seeds in combinations designed to give your customers the type of lawn they’re looking for.
Making Your Seed Recommendation

As mentioned earlier, each tiny grass seed contains DNA with its own genetic code that exhibits specific traits:

- Disease tolerant
- Deep green color
- Slow growing for difficult-to-mow areas
- Greens up earlier in the spring
- Withstands wear and tear
- Thrives in sandy soil
- Drought tolerant, and many more

By selecting the right seed varieties and combining them in the right proportions, EarthCarpet® has created seed mixes that can fulfill the wishes of virtually any customer—even unique ones.

For instance, does your customer need to seed a baseball field? EarthCarpet® Pro-Sports Turf contains seed varieties that will green up in time for opening day, take the heat all summer long, and tolerate wear and tear.

That’s what we mean by “the science is in the seed™.”

Recap Their Needs and Offer Your Seed Recommendation

Keeping in mind the various EarthCarpet® mixtures, recap the customer’s needs aloud. Then allow the customer to choose between the two seed blends that would best meet his needs. Or, if his yard has distinctly different areas, you might recommend a different EarthCarpet® product for each area.

EXAMPLE OF HOW TO RECAP: “Okay, so we have a sunny front lawn, dense shade in the backyard and a steep, hard-to-mow slope next to the garage. You have adequate drainage, you have an in-ground irrigation system, but you have a slight tendency toward moss in the shady backyard. So here’s what I recommend. (Point to or pick up each bag as you talk) Park Place or Heritage will give you a lush, dark green front lawn. Shady Place will thrive in your backyard—it should rectify the moss problem and those thinning places. And since mowing that slope next to the garage is such a pain, I recommend a small bag of low-maintenance Care-Free. It’s slow growing, and that will simplify your weekly lawn-mowing chores dramatically. These varieties will give you quick results, you’ll have less disease than before and your lawn is going to be gorgeous.”
Recap Steps:

- Greet seed customer, determine how turf is to be used.
- Ask about conditions (sun/shade, irrigation program, sloping yard, clay soil, etc.).
- Probe for any existing problems (bare spots, pests, moss, etc.).
- Ask for results of soil test or offer testing kit.
- Recap customer’s needs and recommend appropriate seed mixes.
- Help determine square footage and quantity of seed required.
- Recommend type/quantity of fertilizer.
- Suggest additional items needed for planting (rental equipment, mulch, etc.)
- Ring up sale and provide written instructions for successful planting.

Remember, your customer’s success will be the key to future sales opportunities.

Selling Tip: Nip the “cost” argument in the bud

Diffuse the cost comparison argument in advance by explaining the hidden costs of using common seed. Always speak in terms of “cost per season” instead of “cost per bag.” As always, the best defense is a good offense.
Blue Carpet®

**Lawn Seed Blend**

A combination of top performing cool season Kentucky bluegrass varieties, Blue Carpet™ will provide a lush, dense, dark green carpet of “fairway quality” turf.

- Early spring green-up
- Good Fall color retention
- Excellent wear tolerance
- Fine texture, dense and uniform

**Ideal For:**
- Fine home lawns
- Golf course tees and fairways
- High performance sports fields

**Formulation:** 100% Kentucky Bluegrass (5 elite varieties)

<table>
<thead>
<tr>
<th>Color:</th>
<th>Dark Green</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light:</td>
<td>Full Sun to Light Shade</td>
</tr>
<tr>
<td>Stress Tolerance:</td>
<td>Excellent Disease Resistance, Heat, Cold, Drought and Wear Tolerant</td>
</tr>
<tr>
<td>Texture:</td>
<td>Fine</td>
</tr>
<tr>
<td>Soil:</td>
<td>Medium to Heavy</td>
</tr>
</tbody>
</table>

**Seeding Rate (lbs/1000 sq. ft.):**
- New Seeding: 3-6 lbs
- Overseeding: 1-2 lbs

Boulevard

**Lawn Seed Mixture**

Developed for use on soils with high pH and soluble salt levels, Boulevard Mix grows well in full sun or light shade on a variety of soil types.

- Thrives in full sun to light shade
- Plant in moderate traffic areas

**Ideal For:**
- Starting a new lawn or revitalizing an established home or commercial lawn

**Formulation:** 30% Turf-type tall fescue (2 elite varieties); 25% Creeping red fescue (1 elite variety); 25% Alkali grass (1 elite variety); 20% Intermediate ryegrass (1 elite variety)

<table>
<thead>
<tr>
<th>Color:</th>
<th>Medium Green</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light:</td>
<td>Full Sun to Light Shade</td>
</tr>
<tr>
<td>Stress Tolerance:</td>
<td>Withstands Heat &amp; Drought Stress, Withstands Moderate Traffic, Disease and Salt Tolerant</td>
</tr>
<tr>
<td>Texture:</td>
<td>Medium</td>
</tr>
<tr>
<td>Soil:</td>
<td>Thrives in Most Soil Types</td>
</tr>
</tbody>
</table>

**Seeding Rate (lbs/1000 sq. ft.):**
- New Seeding: 3-5 lbs
- Overseeding: 2-3 lbs

Care-Free Mix

**Lawn Seed Blend**

Care-Free Mix is the perfect solution for difficult to manage sites! This mixture of fine fescues thrives in infertile, dry soils, deep shade and wherever turfgrass is neglected, tortured or forgotten.

- Excellent for soil stabilization and naturalizing
- Perfect for areas where water and fertilizer conservation is important
- Minimal maintenance requirements, once well-established

**Ideal For:**
- Low or no maintenance areas
- Non-mowed slopes
- Areas where watering and/or fertilizing is restricted or prohibited

**Formulation:** 10% Blue fescue (1 elite variety); 30% Creeping red fescue (2 elite varieties); 35% Chewings fescue (2 elite varieties); 25% hard fescue (1 elite variety)

<table>
<thead>
<tr>
<th>Color:</th>
<th>Medium to Dark Green</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light:</td>
<td>Full Sun to Deep Shade</td>
</tr>
<tr>
<td>Stress Tolerance:</td>
<td>Heat, Drought and Cold Tolerant</td>
</tr>
<tr>
<td>Texture:</td>
<td>Fine, Dense and Low Growing</td>
</tr>
<tr>
<td>Soil:</td>
<td>Thrives in Most Soil Types</td>
</tr>
</tbody>
</table>

**Seeding Rate (lbs/1000 sq. ft.):**
- New Seeding: 4-5 lbs
- Overseeding: 2-3 lbs
# champion

**Lawn Seed Mixture**

Developed especially for renovation of athletic fields and other high traffic areas.
- Excellent performance blend of turf-type perennial ryegrasses
- Very quick to germinate and establish
- Provides a durable turf on heavily compacted areas
- Improved genetic color, fine texture and mowability

**Seeding Rate** (lbs/1000 sq. ft.):
- New Seeding: 5-8 lbs
- Overseeding: 2-4 lbs

<table>
<thead>
<tr>
<th>COLOR:</th>
<th>LIGHT:</th>
<th>STRESS TOLERANCE:</th>
<th>TEXTURE:</th>
<th>SOIL:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium to Dark Green</td>
<td>Full Sun to Light Shade</td>
<td>Heat Tolerant, Winter Hardy, Excellent Disease Resistance</td>
<td>Fine</td>
<td>Thrives Well in Most Soil Types</td>
</tr>
</tbody>
</table>

**IDEAL FOR:**
- Renovating athletic fields and other high traffic areas

**FORMULATION:**
100% Turf-type perennial ryegrass (4 elite varieties)

---

# deep shade

**Lawn Seed Mixture**

A mixture formulated for heavily shaded home lawns or commercial properties.
- Quick germination and establishment
- Dark green with fine leaf texture
- Very shade tolerant, once established

**Seeding Rate** (lbs/1000 sq. ft.):
- New Seeding: 4-5 lbs
- Overseeding: 2-3 lbs

<table>
<thead>
<tr>
<th>COLOR:</th>
<th>LIGHT:</th>
<th>STRESS TOLERANCE:</th>
<th>TEXTURE:</th>
<th>SOIL:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dark Green</td>
<td>Full Sun to Deep Shade</td>
<td>Shade and Drought Tolerant</td>
<td>Medium to Fine</td>
<td>Thrives on All Soil Types</td>
</tr>
</tbody>
</table>

**IDEAL FOR:**
- Schools and parks  
- Golf course roughs  
- Home lawns and commercial properties

**FORMULATION:**
30% Creeping red fescue (1); 25% Chewings fescue (1 elite variety); 20% Hard fescue (1 elite variety); 15% Intermediate ryegrass (1 elite variety); 10% Kentucky bluegrass (1)

---

# green resistor®

**Lawn Seed Mixture**

This blend of excellent turf-type tall fescue varieties allows the turf to stay green during periods of heat, drought and disease stress – especially during Brown Patch season. Once well-established, Green Resistor® can stay green even where limited or minimal moisture is available.
- Full sun to moderate shade
- Medium texture with dark green color
- Includes spreading-type varieties for strong persistence
- Salt tolerant turfgrass choice

**Seeding Rate** (lbs/1000 sq. ft.):
- New Seeding: 8-10 lbs
- Overseeding: 4-6 lbs

<table>
<thead>
<tr>
<th>COLOR:</th>
<th>LIGHT:</th>
<th>STRESS TOLERANCE:</th>
<th>TEXTURE:</th>
<th>SOIL:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dark Green</td>
<td>Full Sun to Moderate Shade</td>
<td>Excellent Heat and Drought Tolerance, Winter Hardy with Earlier Spring Green-up, Excellent Disease Resistance</td>
<td>Medium</td>
<td>Light to Heavy</td>
</tr>
</tbody>
</table>

**IDEAL FOR:**
- Fine home lawns  
- Golf course tees and fairways  
- Commercial property turf

**FORMULATION:**
100% Turf-type tall fescue (4 elite varieties)
## Heritage Lawn Seed Mixture

**Seeding Rate** (lbs/1000 sq. ft.):
- New Seeding: 3-6 lbs
- Overseeding: 2-4 lbs

**Ideal For:** New home lawns, revitalizing existing home or commercial turf

**Formulation:** 65% Kentucky bluegrass (3 elite varieties); 35% Turf-type perennial Ryegrass (2 elite varieties)

**Color:** Light Green
**Stress Tolerance:** Withstands Heat and Drought, Extremely Winter Hardy, Tolerates Moderate Traffic
**Texture:** Medium to Fine
**Soil:** Medium to Heavy

This mixture of premium turfgrass varieties quickly establishes a lush, durable lawn in sun or light shade.

- Excellent for starting new lawns or revitalizing existing turf
- Rapid germination and establishment
- Tough, persistent turf

## Madison Parks Lawn Seed Mixture

**Seeding Rate** (lbs/1000 sq. ft.):
- New Seeding: 4-5 lbs
- Overseeding: 2-3 lbs

**Ideal For:** All levels of home lawns, public parks and school grounds

**Formulation:** 15% Kentucky bluegrass (1); 40% Creeping red fescue (1); 15% Perennial ryegrass (1); 30% Annual ryegrass (1)

**Color:** Medium Green
**Stress Tolerance:** Withstands Heat and Drought, Highly Disease Resistant, Extremely Winter Hardy
**Texture:** Medium Fine
**Soil:** Thrives Well in Nearly All Soil Types

Our special economy mixture of grasses. Fast to germinate and establish, and thrives in either sun or light shade. This mixture was specifically formulated to be easy on your budget.

- Starts fast and grows rapidly
- May require overseeding in a few years
- Good choice for quick results

## Michigan Green® Lawn Seed Mixture

**Seeding Rate** (lbs/1000 sq. ft.):
- New Seeding: 6-8 lbs
- Overseeding: 3-5 lbs

**Ideal For:** Excellent choice for the Great Lakes Region

**Formulation:** 15% Kentucky bluegrass (1); 40% Creeping red fescue (1); 15% Perennial ryegrass (1); 30% Annual ryegrass (1)

**Color:** Medium Green
**Stress Tolerance:** Withstands Heat and Drought Stress
**Texture:** Medium to Coarse
**Soil:** Thrives in Most Soil Types
**multi purpose**

Lawn Seed Mixture

An economical mixture for variable conditions. Quick to establish in either sun or light shade. Excellent choice for large commercial properties.

**Seeding Rate** (lbs/1000 sq. ft.):  
New Seeding: 4-6 lbs  
Overseeding: 2-3 lbs

**IDEAL FOR:**  
- Home lawns  
- Parks and commercial landscapes

**FORMULATION:**  
60% Kentucky bluegrass (1); 20% Chewings fescue (1); 20% Perennial ryegrass (1)

**COLOR:**  
- Medium Green

**LIGHT:**  
- Full Sun to Light Shade

**STRESS TOLERANCE:**  
- Heat, Drought and Cold Tolerant

**TEXTURE:**  
- Medium to Fine

**SOIL:**  
- Does well in Any Soil Type

---

**park place**

Lawn Seed Mixture

Our best all-around lawn mixture will make you the envy of the neighborhood. Park Place® contains tough turfgrass species for a dense, medium textured lawn.

**Seeding Rate** (lbs/1000 sq. ft.):  
New Seeding: 4-6 lbs  
Overseeding: 2-4 lbs

**IDEAL FOR:**  
- Home lawns  
- Parks and school grounds

**FORMULATION:**  
50% Kentucky bluegrass (4); 25% Perennial ryegrass (1); 25% Creeping red fescue (1)

**COLOR:**  
- Medium Green

**LIGHT:**  
- Full Sun to Light Shade

**STRESS TOLERANCE:**  
- Resists Heat and Drought  
- Winter Hardy  
- Moderate Traffic

**TEXTURE:**  
- Medium Fine

**SOIL:**  
- Thrives in Most Soil Types

---

**pro-sports turf**

Lawn Seed Mixture

Great turf for new seeding or renovating football, soccer & baseball fields, as well as playgrounds. This mixture was developed to provide durable, high quality turf on high traffic sites.

**Seeding Rate** (lbs/1000 sq. ft.):  
New Seeding: 3-4 lbs  
Overseeding: 2-3 lbs

**IDEAL FOR:**  
- Baseball, Football, Soccer fields  
- Golf course tees & fairways  
- Fine home lawns

**FORMULATION:**  
80% Kentucky bluegrass (5 elite varieties); 20% Turf-type perennial ryegrass (1 elite variety)

**COLOR:**  
- Medium to Dark Green

**LIGHT:**  
- Full Sun to Light Shade

**STRESS TOLERANCE:**  
- Disease Resistant  
- Heat, Drought and Cold Tolerant  
- Withstands Heavy Traffic

**TEXTURE:**  
- Medium

**SOIL:**  
- Medium to Heavy
**quick-2-gro**

**Seeding Rate** (lbs/1000 sq. ft.):
- New Seeding: 4-5 lbs
- Overseeding: 2-3 lbs

Economical turfgrass mixture for full sun to light shade.
- Germinates quickly and grows rapidly
- Excellent choice when fast results are required

**IDEAL FOR:** - Home lawns and commercial properties

**FORMULATION:** - 100% Turf-type perennial ryegrass (3 elite varieties)

<table>
<thead>
<tr>
<th>COLOR:</th>
<th>LIGHT:</th>
<th>STRESS TOLERANCE:</th>
<th>TEXTURE:</th>
<th>SOIL:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium Green</td>
<td>Full Sun to Light Shade</td>
<td>Withstands Heat and Drought</td>
<td>Medium to Coarse</td>
<td>Medium to Heavy Soils</td>
</tr>
</tbody>
</table>

**IDEAL FOR:** - Playgrounds, parks and school properties

**FORMULATION:**
- 10% Creeping red fescue (1)
- 15% Chewings fescue (1 elite variety)
- Medium to Heavy Soils
- Will Perform on Damp Sites

**ready lawn**

**Seeding Rate** (lbs/1000 sq. ft.):
- New Seeding: 6-8 lbs
- Overseeding: 3-4 lbs

A fast germinating turf, ideally suited to use on home lawns, parks and commercial landscapes.
- Rapid germination and establishment
- Handles variable growing conditions

**IDEAL FOR:** - Home lawns and commercial turf
- Parks and school grounds

**FORMULATION:** - 65% Turf-type perennial ryegrass (2 elite varieties); 25% Kentucky bluegrass (1 elite variety); 10% Chewings fescue (1 elite variety)

<table>
<thead>
<tr>
<th>COLOR:</th>
<th>LIGHT:</th>
<th>STRESS TOLERANCE:</th>
<th>TEXTURE:</th>
<th>SOIL:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium to Dark Green</td>
<td>Full Sun to Light Shade</td>
<td>Heat and Drought Tolerant</td>
<td>Medium Fine</td>
<td>Tolerates Most Soil Types</td>
</tr>
</tbody>
</table>

**IDEAL FOR:** - Home lawns and commercial turf
- Parks and school grounds

**FORMULATION:**
- 25% Perennial ryegrass (1)
- 25% Kentucky bluegrass (1)
- 25% Annual ryegrass (1)
- 10% Creeping red fescue (1)
- Medium Fine
- Tolerates Most Soil Types

**Seeding Rate** (lbs/1000 sq. ft.):
- New Seeding: 8-10 lbs
- Overseeding: 4-5 lbs

Quick establishing, dark green turf with good wear tolerance.
- Durable turf for compacted soils
- Germinates quickly and establishes easily
- Dark green color

**IDEAL FOR:** - Home lawns and commercial turf
- Playgrounds, parks and school properties

**FORMULATION:** 100% Turf-type perennial ryegrass (3 elite varieties)

<table>
<thead>
<tr>
<th>COLOR:</th>
<th>LIGHT:</th>
<th>STRESS TOLERANCE:</th>
<th>TEXTURE:</th>
<th>SOIL:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium to Dark Green</td>
<td>Full Sun to Light Shade</td>
<td>Withstands Heat and Cold</td>
<td>Fine to Medium</td>
<td>Thrives on Most Soils</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Good Disease Resistance</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Shady Place

**Ideal for:** Home lawns with moderate sun to densely shaded areas

**Formulation:**
- 20% Kentucky bluegrass (2 elite varieties)
- 20% Chewings fescue (1 elite variety)
- 20% Creeping red fescue (1 elite variety)
- 20% Hard fescue (1 elite variety)
- 20% Perennial ryegrass (1 elite variety)

**Seeding Rate** (lbs/1000 sq. ft.):
- New Seeding: 4-5 lbs
- Overseeding: 2-3 lbs

**Color:** Light

**Stress Tolerance:**
- Withstands Heat and Drought
- Extremely Winter Hardy
- Disease Resistant (Especially Powdery Mildew)

**Texture:** Medium Fine

**Soil:** Thrives on Most Soil Types

### Spartan

**Ideal for:** Low to medium maintenance areas where a beautiful lawn is desired

**Formulation:**
- 40% Kentucky bluegrass (2 elite varieties)
- 20% Chewings fescue (1 elite variety)
- 20% Creeping red fescue (1 elite variety)
- 20% Turf-type perennial ryegrass (2 elite varieties)

**Seeding Rate** (lbs/1000 sq. ft.):
- New Seeding: 4-6 lbs
- Overseeding: 2-4 lbs

**Color:** Medium to Dark Green

**Stress Tolerance:**
- Withstands Heat and Drought
- Extremely Winter Hardy
- Disease and Pest Resistant

**Texture:** Medium to Fine

**Soil:** Thrives on Most Soil Types

### Sports Parks OS

**Ideal for:** Public parks, Sports fields, School playgrounds

**Formulation:**
- 50% Kentucky bluegrass (3 elite varieties)
- 50% Turf-type perennial ryegrass (2 elite varieties)

**Seeding Rate** (lbs/1000 sq. ft.):
- New Seeding: 4-7 lbs
- Overseeding: 2-3 lbs

**Color:** Dark Green

**Stress Tolerance:**
- Heat and Drought Tolerant
- Disease and Pest Resistant
- Winter Hardy

**Texture:** Medium Fine

**Soil:** Thrives on Most Soil Types
### Sun and Shade

**Lawn Seed Mixture**

*The ideal choice for homeowners who have mixed sun and shade areas.*

- **Seeding Rate** (lbs/1000 sq. ft.):
  - New Seeding: 4-5 lbs
  - Overseeding: 2-3 lbs

**Ideal For:**
- Home lawns and commercial landscapes
- Public parks and schoolyards

**Formulation:**
- 30% Kentucky bluegrass (1)
- 20% Turf-type perennial ryegrass (2 elite varieties)
- 10% Hard fescue (1 elite variety)
- 20% Creeping red fescue (1 elite variety)
- 20% Chewings fescue (1 elite variety)

**Color:**
- Medium to Dark Green

**Light:**
- Full Sun to Moderate Shade

**Stress Tolerance:**
- Resistant to Drought and Heat
- Extremely Winter Hardy
- Disease Resistant

**Texture:**
- Medium Fine

**Soil:**
- Thrives on Most Soil Types

### Sunny Place®

**Lawn Seed Mixture**

*Excellent turf choice for sunny lawn projects on a budget. Sunny Place® establishes fast and produces a dark green, fine-bladed lawn.*

- **Seeding Rate** (lbs/1000 sq. ft.):
  - New Seeding: 4-5 lbs
  - Overseeding: 2-3 lbs

**Ideal For:**
- Home lawns and commercial landscapes
- Parks and general turf sites

**Formulation:**
- 33% Kentucky bluegrass (1)
- 33% Creeping red fescue (1)
- 34% Perennial ryegrass (1 elite variety)

**Color:**
- Medium

**Light:**
- Full Sun to Light Shade

**Stress Tolerance:**
- Good Heat and Drought Tolerance
- Winter Hardy Turf

**Texture:**
- Medium Fine

**Soil:**
- Thrives on Most Soil Types

### Survivor

**Lawn Seed Mixture**

*Specially formulated for athletic fields and playgrounds, looking for an economical seed choice. This mixture thrives even under constant use. Survivor is highly stress tolerant and requires minimal care.*

- **Seeding Rate** (lbs/1000 sq. ft.):
  - New Seeding: 5-6 lbs
  - Overseeding: 3-5 lbs

**Ideal For:**
- Economical, utility lawn mix
- Difficult to maintain turf sites
- Sports fields and public parks

**Formulation:**
- 40% Turf-type tall fescue (1 elite variety)
- 15% Creeping red fescue (1)
- 15% Chewings fescue (1 elite variety)
- 15% Kentucky bluegrass (1)
- 15% Perennial ryegrass (1)

**Color:**
- Medium Green

**Light:**
- Full Sun to Moderate Shade

**Stress Tolerance:**
- Withstands Heat and Drought
- Disease Resistant
- Winter Hardy

**Texture:**
- Medium to Coarse

**Soil:**
- Thrives on Most Soil Types
### Velvetread®

**Seeding Rate (lbs/1000 sq. ft.):**
- New Seeding: 3-4 lbs
- Overseeding: 2-3 lbs

**Ideal For:** 
- New home or commercial property lawns
- Revitalizing existing lawns

**Formulation:**
- 40% Kentucky bluegrass (2 elite varieties); 10% Chewings fescue (1 elite variety); 10% Creeping red fescue (1 elite variety); 40% Turf-type perennial ryegrass (2 elite varieties)

**Color:** Medium to Dark Green
**Light:** Full Sun to Deep Shade
**Stress Tolerance:**
- Excellent Heat and Drought Tolerance
- Disease Resistant
- Excellent Insect Resistance
- Winter Hardy
**Texture:** Medium to Coarse
**Soil:** Thrives on Most Soil Types

This elite mix is well suited for full sun or light shade. Velvetread® will produce a dense, velvety lawn that is both disease resistant and tolerant to summer stress.

- Thrives in full sun to light shade
- Plant in moderate traffic areas

### Watertight®

**Seeding Rate (lbs/1000 sq. ft.):**
- New Seeding: 8-10 lbs
- Overseeding: 4-6 lbs

**Ideal For:**
- Fine home lawns
- Golf course tees and fairways
- Commercial property turf

**Formulation:**
- 100% Turf-type tall fescue (3 elite varieties)

**Color:** Dark Green
**Light:** Full Sun to Moderate Shade
**Stress Tolerance:**
- Excellent Heat and Drought Tolerance
- Winter Hardy
- Excellent Disease Resistance (especially Brown Patch)
**Texture:** Medium to Coarse
**Soil:** Thrives on Most Soil Types

This blend of turf-type tall fescue varieties maintains green turf during periods of heat, drought and disease stress. Once well-established, Watertight® can stay green even where rainfall or irrigation is limited.

- Full sun to medium shade
- Medium-coarse texture with dark green color
- Very salt tolerant turf

### Tuff-Stuff®

**Seeding Rate (lbs/1000 sq. ft.):**
- New Seeding: 8-10 lbs
- Overseeding: 4-6 lbs

**Ideal For:**
- Lawn mixture for poor soil sites
- Athletic fields, playgrounds and parks

**Formulation:**
- 90% Turf-type tall fescue (3 elite varieties); 10% Kentucky bluegrass (2 elite varieties)

**Color:** Medium to Dark Green
**Light:** Full Sun to Deep Shade
**Stress Tolerance:**
- Excellent Heat and Drought Tolerance
- Disease Resistant
- Excellent Insect Resistance
- Winter Hardy
**Texture:** Medium to Coarse
**Soil:** Thrives on Most Soil Types

Superior turfgrass varieties that provide the best overall drought, insect and disease-tolerant turf. Excellent for areas where high quality turf is important and lower maintenance is desired. Tuff-Stuff® forms a rugged, durable turf that stands up to constant use.

- Fast germination and establishment
- Highly stress tolerant
- Tolerates heat, drought and poor soils
- Less management required
**watertight® 90/10**

*Lawn Seed Mixture*

This blend of turf-type tall fescue and perennial ryegrass can stay green during periods of heat, drought and disease stress. Once well-established, Watertight® 90/10 can stay green even where rainfall or irrigation is limited due to drought conditions.

- Fast germination and establishment
- Full sun to medium shade
- Salt tolerant turf

**Seeding Rate (lbs/1000 sq. ft.):**
- New Seeding: 8-10 lbs
- Overseeding: 4-6 lbs

**Ideal For:**
- Fine home lawns
- Golf course tees and fairways
- Commercial property turf

**Formulation:**
- 90% Turf-type tall fescue (3 elite varieties)
- 10% Turf-type perennial ryegrass (1 elite variety)

**Color:**
- Dark Green

**Light:**
- Full Sun to Moderate Shade

**Stress Tolerance:**
- Excellent Heat and Drought Tolerance
- Winter Hardy
- Excellent Disease Resistance (especially Brown Patch)

**Texture:**
- Medium

**Soil:**
- Light to Heavy

---

**watertight® 80/20**

*Lawn Seed Mixture*

This blend of turf-type tall fescue and perennial ryegrass stays green longer during periods of heat, drought and disease stress. Once well-established, Watertight® 80/20 may green even where rainfall or irrigation is limited due to drought conditions.

- Fast germination and establishment
- Full sun to medium shade
- Salt tolerant turf

**Seeding Rate (lbs/1000 sq. ft.):**
- New Seeding: 8-10 lbs
- Overseeding: 4-6 lbs

**Ideal For:**
- Fine home lawns
- Golf course tees and fairways
- Commercial property turf

**Formulation:**
- 80% Turf-type tall fescue (3 elite varieties)
- 20% Turf-type perennial ryegrass (1 elite variety)

**Color:**
- Dark Green

**Light:**
- Full Sun to Moderate Shade

**Stress Tolerance:**
- Excellent Heat and Drought Tolerance
- Winter Hardy
- Excellent Disease Resistance (especially Brown Patch)

**Texture:**
- Medium

**Soil:**
- Light to Heavy

---

**watertight® 80/10/10**

*Lawn Seed Mixture*

This blend of turf-type tall fescue, Kentucky bluegrass and intermediate ryegrass establishes very rapidly. Watertight® 80/10/10 may remain green longer during periods of heat, drought and disease stress. Once well-established, Water Tight 80/10/10 remains green when rainfall or irrigation is limited due to drought conditions.

- Very rapid germination and establishment
- Full sun to medium shade
- Salt tolerant turf

**Seeding Rate (lbs/1000 sq. ft.):**
- New Seeding: 8-10 lbs
- Overseeding: 4-6 lbs

**Ideal For:**
- Home lawns
- Golf course tees and fairways
- Commercial property turf

**Formulation:**
- 80% Turf-type tall fescue (3 elite varieties)
- 10% Kentucky bluegrass (1)
- 10% Intermediate ryegrass (1 elite variety)

**Color:**
- Medium to Dark Green

**Light:**
- Full Sun to Moderate Shade

**Stress Tolerance:**
- Excellent Heat and Drought Tolerance
- Winter Hardy
- Excellent Disease Resistance (especially Brown Patch)

**Texture:**
- Medium

**Soil:**
- Light to Heavy
The four hallmarkS of Turfgrass quality: just as diamonds have the four c’S (cut, color, clarity and caret weight), turf has its own benchmarks for quality:

1. **Color**—The darker the green, the higher the quality
2. **Texture**—The finer the texture, the higher the quality
3. **Uniformity**—Uniform turf trumps clumpy turf
4. **Density**—Thicker turf is superior to thin, open turf

---

**Seed Variety Characteristics**

**Fine Fescues**

Three grasses go under the common name of fine fescue: chewings fescue, creeping red fescue, and hard fescue. All survive extreme cold and combine well with other cool-season grasses. None of the fine fescues tolerate wear and tear, but they have the unusual talent of being able to grow in dry shade. Hard fescue has a strong bunching habit that makes it appear less refined than other lawn grasses, but will persist in difficult sites that are unusually cold, windy and dry.

The fescues are cool season grasses that are adapted to the transition zone and into Canada. The fescue species are easily seeded and all share the same variety characteristics with the three dominant ones being shade tolerance, staying green all year, and having good drought resistance. Fine Fescues are more cold and shade tolerant than Tall Fescue, but both are used throughout much of the Central to Northern USA states. They require less fertilizer and moisture than any of the lawn grasses adapted to the cool or Northern regions of the United States. Thus, they have the lowest overall maintenance requirements. They are well adapted to poor, sandy soils of low fertility and will tolerate soil acidity within the pH range of 5.0 to 6.5. Fine Fescues germinate rapidly and establish generally without delay. Thus, they are excellent choices for reseeding thin and rundown lawns.
Kentucky Bluegrass

Kentucky bluegrass is a cool-season grass that grows best during the fall, winter, and spring months when temperatures are cool. Its growth slows during the warm summer months. Kentucky bluegrass prefers full sun, but will tolerate some shade. This species is used widely throughout the U.S. where it is well adapted, but it has a poor summer performance in areas with warm to hot temperatures. When stressed by temperatures, lack of water, or poor soils, Kentucky bluegrass can be susceptible to disease and weed invasion. It can tolerate cold winters, but has a relatively low tolerance for heat and is only moderately drought tolerant. During the summer months, if stressed for water, Kentucky bluegrass can go dormant. It has moderate wear tolerance, recovering quickly from some abuse.

Kentucky bluegrass provides a dark-green, medium-textured turf. Grass color ranges from bright green to deep bluish green. This species spreads by underground rhizomes that can self-repair injured, worn, or damaged spots. Kentucky bluegrass produces a dense turf. It is moderate to high maintenance and makes beautiful home and sports grasses.

Tall Fescue

Tall fescue is a cool-season grass, well adapted to sunny or partially shady areas. When densely sown, a pure stand forms a moderate to coarse-textured lawn that is uniform in appearance with good weed and disease resistance. Tall fescue tolerates warm summer temperatures and stays green during cool, but not severe winter conditions. New varieties that are finer in texture and shorter in stature are known as turf-type tall fescues and dwarf turf-type tall fescues. Tall fescue is a good species to plant for general lawn use and is the most common lawn grass in California.

Tall fescue is a coarse-textured medium to dark-green grass. It has an extensive root system is low maintenance, and will tolerate moderate traffic and infrequent mowing. Because tall fescue has a bunch-type growth habit, rather than a creeping-type, open areas may develop and need to be reseeded. This species is not well adapted to high altitudes.

Ryegrasses - Annual & Perennial

Ryegrasses were brought to the USA from Europe and are now grown and planted throughout the country. These bunch grasses have two basic types; annual and perennial. Each type is planted as a pure strain or used in mixtures depending on the specific lawn use desired. Do not confuse these two kinds as being the same. They are adapted into lawns mainly for their fast growing ability as a cool season grass. Perennial is a permanent lawn choice in more cooler climate areas, and annual is seeded yearly and lives for one season. Ryegrasses (both annual and perennial) can be grown on their own in the northern states for lawns. In many areas of the country, largely because this grass is so versatile, it is incorporated in seeding mixtures with other grasses.

Bright green, fast growing, and prolific; the ryegrasses do much for lawns by adding contrasting color to early spring flowers, trees and shrubs.
Fertilizer 101 –
Choosing the Right Fertilizer
Fertilizer 101

Now that you’ve decided on a seed mix, it’s time to choose the right type of fertilizer.

Up, Down, All Around

So what do those three fertilizer numbers mean? They represent three nutrients essential to strong, healthy turfgrass: nitrogen, phosphorus and potassium or potash.

In a fertilizer analysis, the three nutrients are always listed in the same order. An easy way to remember what those nutrients do is “up, down, all around.”

- **NITROGEN (N) - UP** promotes dark green color and increases leaf and stem growth.

- **PHOSPHORUS (P) - DOWN** stimulates early root formation and growth and prepares grass for dormancy and winter hardiness.

- **POTASSIUM OR POTASH (K) - ALL AROUND** provides overall health to grass, increasing resistance to disease and drought stress.

Signs of Nitrogen Deficiency

Nitrogen is represented by the first number. Telltale signs of nitrogen deficiency are:

- Overall reduction in plant growth
- Loss of green color, yellowish green color starting at the leaf tips
- Thinning of plants, overall plant density and coverage decreases

There are two types of nitrogen fertilizers: fast release and slow release

- Fast release is typically found in agricultural fertilizers.
  - Works for 7-12 days
  - It’s fast acting—almost too fast for turfgrass because the nutrients often pass on through the soil before the roots can absorb them

- Slow release is optimal for turfgrass
  - Works for 3-12 weeks
  - The nutrients stay in the root zone long enough for the plant to absorb them, so less is wasted

**pH IS NOT A NUTRIENT**

pH is the measure of soil acidity or alkalinity – how sour or sweet the soil is.
Signs of Phosphorus Deficiency

Phosphorus, the #2 number, is a key nutrient in seed starter fertilizers because it stimulates root growth. Telltale signs of phosphorus deficiency are:

- Dark green color on lower leaves only
- Purplish color on leaf edges
- Spindly, weak growth
- Little to no root system formed

Signs of Potassium Deficiency

Potassium, the #3 number, contributes to overall health and enables the plant to tolerate heat, drought, cold and wear & tear. It also aids in disease resistance. Potassium deficiency isn’t always easy to detect:

- In some case, wilting and or drooping plants
- Yellowing and discoloration may occur
- Overall reduction of plant vigor

Soil testing measures phosphorus, potassium and pH.

Ideal pH for Turfgrass is 6.5 to 6.8.

Ideal pH means plants have the maximum ability to use the nutrients from soil. Otherwise, it’s as if the nutrients are locked up and unavailable for the plants, so the plants can never reach their full potential. Fortunately, there are ways to correct pH balance. Lime raises soil pH. Granulated sulfur lowers soil pH.

![Test, don’t guess – There’s simply no substitute for a soil test. Soil testing identifies what the soil needs and doesn’t need, such as more lime or less potassium. It offers clues as to which seeds and fertilizer will give customers the best results. It only takes minutes, but the benefits last all season long. Emphasize this to your customers. Explain the testing process and show them the testing kits you offer.](image-url)
2 Big Questions to Ask When Recommending Fertilizer:

1. What are the results of your soil analysis?
   (Explain the importance of soil analysis and how to perform it)
2. What, if any, problems have you experienced in the past with this lawn?
   (Yellowing? Failure to thrive?)

The Prevail® and Natural Green® portfolios of premium fertilizers from Spring Valley.

La Crosse Forage & Turf Seed is pleased to offer high quality and state-of-the-art fertilizer line-ups from Spring Valley. The Prevail® line of professional fertilizer products, as well as the Natural Green® line of consumer oriented fertilizer formulations, contain unique technologies to ensure maximum results and benefits for better green space management.

Prevail® and Natural Green® are excellent companions to ensuring a healthy, strong EarthCarpet® turf.
Protecting Nutrient Investments and the Environment
Spring Valley is proud to introduce a new generation of **professional fertilizer products**, Prevail®. Prevail® is quite simply, better, smarter and responsible. Prevail® integrates the latest advancements in nutrient technologies that allow for maximum green space management, minimal nutrient loss and cost effectiveness. Prevail® moves beyond conventional products, providing maximum results and efficiency. It uses less product, therefore lowering your overall costs, in addition to being better for the environment.

**Prevail® Fertilizers**
Protecting Nutrient Investments and the Environment

**N-Lite®**
After years of University and USDA testing, Spring Valley is proud to bring you the next generation of fertilizers featuring N-Lite® - a highly diversified microbial-based additive specifically developed to aid in fertilizer efficiency. N-Lite® integrates the latest advancements in nutrient technology that are better for greenspace management, the environment and your bottom line.

- **Better Results** - N-Lite® products consistently outperform conventional fertilizers in multiple University tests.
- **Healthier Turf** - N-Lite® products promote greater nutrient uptake resulting in enhanced root development.
- **Use Less** - N-Lite® products produce results at 20% - 30% lower rates.
- **Environmental Leadership** - N-Lite® products maximize performance with extremely efficient use of fertilizer.

**Regain® NS**
Spring Valley is proud to introduce Regain®, a highly effective, cost efficient stabilized nitrogen line of products. Regain® prevents the loss of valuable applied nitrogen through the air and soil by controlling the enzyme (urease) that causes ammonia volatilization.

- **Efficient** – Regain® when compared to untreated urea nitrogen prevents the loss of up to 50% of active product through volatilization and leaching.
- **Use Less** - Regain® products produce results at 20% - 30% lower rates.
- **Environmental Leadership** - Regain® products lead to less nitrate runoff in waterways and less ammonia and greenhouse gas emissions.
- **Cost Savings** - Regain® products deliver their benefits at lower application rates which decrease fertilizer costs over similar areas of application.

*Regain stabilized nitrogen powered by Nutrisphere®
EARLY SPRING
Crabgrass Control 15-0-4 + Dimension®, N-Lite®
- Premium granular fertilizer
- 100% Regain* protected nitrogen
- .10 Dimension® crabgrass preventer for 3-5 months
- 50 lb. = 11,600 sq. ft.
- Apply in Spring

LATE SPRING
Weed and Feed 18-0-2 + Trimec®, N-lite®
- Premium granular fertilizer
- 100% Regain* protected nitrogen
- Contains Trimec® for superior control of dandelions and over 140 other broadleaf weeds
- 50 lb. = 12,500 sq. ft.
- Apply in late spring-early summer

SUMMER
Turf Food 18-0-4 + N-Lite®
- Premium granular fertilizer
- 100% Regain* protected nitrogen
- 50 lb. = 11,900 sq. ft.
- Apply in Summer

FALL WINTERIZER
For normal winterization repeat application of Turf Food or for additional weed control choose a second application of Weed and Feed.

ALL SEASON
Lawn & Seed Starter 12-16-8 + N-Lite®
- Premium granular fertilizer
- 34% Regain* protected nitrogen
- For new lawns, overseeding, sprigs, seedlings, and sod
- 50 lb. = 12,500 sq. ft.

Moving beyond conventional...
... providing maximum results and benefits for better green space management.
Natural Green® Fertilizers

The Natural Green® consumer product line provides the best in lawn care fertilization while helping to maintain a healthy environment. Natural Green® provides 60% more root mass which results in a greener, thicker lawn. Natural Green® is eco-friendly, helping to conserve water and the environment.

**EARLY SPRING**
STEP 1
Prevents grassy weeds from germinating and provides early season green-up

**SPRING**
STEP 2
Controls dandelions, clover, and over 150 other broadleaf weeds after they emerge and feeds turf for up to 8 weeks.

**EARLY SUMMER**
STEP 3
Provides sustained feeding and strengthens roots to withstand heat and drought for up to 8 weeks.

**LATE SUMMER**
STEP 4
Feeds turf and controls broadleaf weeds as they are actively growing in late summer or early fall.

**FALL**
STEP 5
Thickens turf and builds stronger, deeper roots to prepare turfgrass for dormancy and early spring green-up.
Getting Your Customer Off On The Right Foot
Getting the Customer Off On the Right Foot

Now that you’ve selected the seed and the fertilizer, what’s next?

There’s nothing worse than being primed to tackle a project, then getting home and discovering you don’t have everything you need. Don’t let that happen to your customers. Adapt these general guidelines to your specific region and climate and you’ll be sending your customer home with everything he or she needs to do the job right.

- **Herbicide containing glyphosate.** Recommend that customers prepare the soil by first spraying a herbicide containing glyphosate, such as Roundup®. This will eliminate competing seeds from the outset. Remind them to follow manufacturer’s directions for proper use.

- **Limestone.** If soil analysis determined that pH was too low, the customer should apply limestone to the soil before planting. Lime raises soil pH.

- **Granular sulfur.** If soil analysis determined that pH was too high, the customer should apply granular sulfur to the soil before planting. Granular sulfur lowers soil pH.

- **Seeding equipment sales or rentals.** Tell your customer where to buy or rent the following, if needed:
  - Lawn roller
  - Seed/fertilizer spreader (broadcast spreader or drop spreader)
  - Core aerator
  - Mechanical seed planting equipment
Determining How Much Seed and Fertilizer to Buy

The most precise way to determine how much seed and fertilizer to buy is to start by measuring the area to be seeded—total square footage less any non-lawn areas such as house, walkways, flower beds, etc.

| Lot Size: | 160 sf x 100 sf: ...........................................16,000 sf |
| Subtractions: | Home: ............................................. 2,800 sf |
| | Driveway: ................................................ 800 sf |
| | Sidewalk: ................................................. 150 sf |
| | Flowerbeds: ................................................. 350 sf |
| | Patios/Decks: ................................................ 300 sf |
| Total SF: | .................................................................11,600 sf |
| Prevail® Fertilizer with Crabgrass Control: | .........................One 50 lb bag |

**Home:** A half-acre lot is 21,780 square feet. A quarter-acre lot is 10,890 square feet. Whatever the size of the lot, remember to subtract the square footage of the home’s “footprint,” driveway, patio, flowerbed, etc., as shown above.

**Soccer Field:** Dimensions of the actual playing field range from 100 yards by 50 yards (minimum) to 130 yards by 100 yards (maximum). So a small soccer field could be 45,000 square feet while a large field could be up to 117,000 square feet.

**Football Field:** Dimensions of the actual playing field are 53 yards by 100 yards or 47,700 square feet.

Customer Advice for After Purchase

You’ve rung up the sale and loaded the products into their car, but how do you truly make sure customers have a successful experience?

Don't expect your customers to remember all the valuable advice you've offered. Give them instructions in writing. The EarthCarpet® Lawn Planting Guide brochure provides all the information your customer needs:

- Establishing a Brand New Lawn
- Renovating an Existing Lawn

Include this brochure with seed purchase, or photocopy the next two pages.
Establishing a Brand New Lawn

You’ll be well on your way to a beautiful lawn if you follow these steps and avoid the most common errors:

1. **The best defense is a good offense.** Before you plant your grass seed, eliminate any competing seeds from unwanted grasses and weeds by spraying your lawn with a herbicide containing glyphosate such as Roundup®. Be sure to follow manufacturer’s directions for proper use.

2. **Rough grading.** Remove any rocks or debris golf ball size or larger. Level any noticeable high or low spots. Check to be sure that your yard is sloping downhill and away from your house to the edge of your lot (you do not want water to collect alongside your house).

3. **Amending the soil.** Consider the results of your soil test. If the test indicated your soil is lacking in any way, now is the time to spread any needed amendments (lime, potassium or phosphorus). Then till the soil to a depth of 2 to 4 inches. An ideal seedbed consists of soil particles ranging in size from a quarter inch to a full inch.

   **NOTE:** Do NOT over till! Working the soil to a fine powder will cause it to crust over and dry out quickly. This will result in poor lawn establishment.

4. **Final grading.** Rake and smooth the soil. Take a final look for any low or high spots and correct any that remain.

5. **Firm up the soil.** Before you seed, lightly dampen the soil with a fine mist from the hose (if puddles are forming, you’re applying too much water).

6. **Apply seed.** Using the seeding rate appropriate for the chosen seed mixture, apply seed evenly in two directions.

7. **Apply seed starter fertilizer.** This step is absolutely essential for proper root development.

8. **Roll the surface.** Use an unfilled lawn roller to firm, but not over pack, the soil surface (ask your seed salesman where to buy or rent a lawn roller).

9. **Cover the seeds.** Apply a layer of clean, weed-free straw or mulch to discourage both birds and soil erosion and to encourage moisture absorption. Seed Aid pelleted mulch is a good choice.

10. **Irrigate, irrigate, irrigate.** Water as often as necessary to keep the top half-inch of soil constantly moist, but not soaking. Commit to watering at least three times per day for six weeks. This is crucial: Do not let the soil dry in the afternoon sun and heat. Best times to water are from morning until 2 or 3 in the afternoon. Avoid watering in the evening (fungus loves a moist, dark place to grow).

11. **Three weeks after seeding.** It’s time to re-apply seed starter fertilizer. Again, this is absolutely crucial to your success.

12. **Time to mow.** When the first seedlings reach 3 to 4 inches, begin weekly mowing. Set the mowing height to 2 - 2 1/2 inches. Keep mower blades sharp. Do not mow directly after watering to avoid damaging seedlings. At six weeks it’s time to raise the mowing height to 3 - 3 1/2 inches. Mow as often as required in order to follow the 1/3 rule: never remove more than one-third of the grass blade at a time.
13. **At eight weeks.** At this point, it’s safe to begin standard fertilization and irrigation programs. Do not apply any weed control products until the lawn has been mowed at least four times and a minimum of eight weeks has passed since seeding. Follow manufacturer’s recommendations for new lawns.

14. **Pat yourself on the back.** If you’ve followed all of the steps above, you have a lush, beautiful lawn that is the envy of your neighbors.

**Renovating an Existing Lawn**

You’ll be well on your way to a beautiful lawn if you follow these steps and avoid the most common errors:

1. **The best defense is a good offense.** Before you plant your grass seed, eliminate any competing seeds from unwanted grasses and weeds by spraying your lawn with a herbicide containing glyphosate such as Roundup®. Be sure to follow manufacturer’s directions for proper use.

2. **Scalp the lawn.** Mow your existing lawn as low as possible without stalling the mower. Rake and remove clippings.

3. **Aerate.** Core aerate your lawn to encourage abundant root growth of new turfgrass. Equipment should be available for rental in your area.

4. **Apply seed.** Using the seeding rate appropriate for the chosen seed mixture, apply seed evenly in two directions. Plant new seed no deeper than 1/8 inch deep with mechanical planting equipment. Equipment should be available for rental in your area.

5. **Apply seed starter fertilizer.** This step is absolutely essential for proper root development. DO NOT apply a high nitrogen fertilizer at this time or existing grass will overwhelm seedlings.

6. **Irrigate, irrigate, irrigate.** Water as often as necessary to keep the top half-inch of soil constantly moist, but not soaking. Commit to watering at least three times per day for six weeks. This is crucial: Do not let the soil dry in the afternoon sun and heat.

7. **Three weeks after seeding.** It’s time to re-apply seed starter fertilizer. Again, this is absolutely crucial to your success.

8. **Time to mow.** When the first seedlings reach 1 1/2 - 2 inches, begin weekly mowing. Set the mowing height to 1 1/2 inches. Keep mower blades sharp. Do not mow directly after watering to avoid damaging seedlings.

9. **At six weeks.** Now it’s time to raise the mowing height to 3 - 3 1/2 inches. Mow as often as required in order to follow the 1/3 rule: never remove more than 1/3 of the grass blade at a time.

10. **At eight weeks.** At this point, it’s safe to begin standard fertilization and irrigation programs. Do not apply any weed control products until the lawn has been mowed at least four times and a minimum of eight weeks has passed since seeding. Follow manufacturer’s recommendations for new lawns.

11. **Pat yourself on the back.** If you’ve followed all of the steps above, you have a lush, beautiful lawn that is the envy of your neighbors.

Adapt these guidelines as needed according to your region/climate.
Common Lawn Blunders and How to Avoid Them

We’ve covered a few of these, but they’re worth repeating.

- **Don’t mow the grass too short.** Follow the 1/3 rule—never remove more than one-third of the blade at a time. It’s better to mow more frequently than to cut too much in a single pass.

- **Don’t water in the evening.** Watering at night can promote fungus. Watering at midday is inefficient because much of the water evaporates before it can be absorbed. Watering in the morning is ideal.

- **Don’t stop watering newly seeded grass too soon.** Just because a few seedlings have popped up, don’t assume it’s safe to stop keeping the soil moist. EarthCarpet® seed mixes contain a variety of seeds chosen for their various attributes. Some are fast growing, but others are desirable for deep green color or hardiness. They may emerge later, so keep watering for at least six weeks.

- **Don’t apply a major herbicide too soon after seeding.** You could kill your new turf before it’s well established. Wait at least eight weeks and then follow manufacturer’s instructions carefully.

- **Don’t suffocate, aerate.** Loose soil with lots of earthworms may never need aerating. But soil with lots of clay may need aerating once a year. Athletic fields may need it every few months. Aeration lets moisture penetrate the soil.

- **Don’t let thatch build up.** Thick layers of dead stems and roots are an invitation to disease. Use a power rake when needed to remove thatch.

- **Don’t plant the wrong seeds in the wrong spot.** Seeds that require full sun will never flourish in dense shade, no matter how much care you lavish on them. Don’t fight nature. Choose the right seeds for the right conditions.

- **Don’t use an inadequate fertilizer program.** For example, Blue Carpet requires a more aggressive fertilizer program. Care-Free requires less care. You’ll need more fertilizer for sandy soil than for clay.

- **Don’t stop watering.** Although a well-established lawn doesn’t require daily watering under normal conditions, you do need to keep the top 4-6 inches of soil from drying out. Weeds thrive in dry, cracked soil. Watering in the mornings is best.

For more information

If you have questions that aren’t answered here, please visit EarthCarpet.com. From there, you can email a question or find toll-free numbers to call the EarthCarpet® Service Center near you.
Diagnosing Turf Problems & Identifying Common Weeds
Diagnosing Turf Problems

Red Thread

**Problem:** This fungus thrives in cool, humid environments and gives lawn a bleached, patchy appearance.  
**Solution:** If soil nitrogen is low, fertilize. Avoid frequent, light watering in late afternoon/evening. Water deeply in the mornings instead.

Dollar Spot

**Problem:** This fungus thrives in high humidity when soil is low in moisture and is indicated by straw-colored circles and faint cobwebby growth visible in dew-covered grass.  
**Solution:** Fertilize and water regularly. Use fungicide as necessary. Avoid watering in late afternoon/evening.

Rust

**Problem:** This fungus produces orange postules on leaf blades, giving turf an orange appearance. Rust may weaken a lawn making it vulnerable to winter kill.  
**Solution:** Control with adequate fertilization and watering. Remove clippings when mowing. Use fungicide if necessary.

Cinch Bugs

**Problem:** Larvae that suck the plant juices from grass, producing yellow patches in lawn. To diagnose, spread grass and look for small red and black bugs.  
**Solution:** Regular watering will often eliminate cinch bugs. If not, spray with insecticidal soap every two or three days for a week or so. If you resort to heavy artillery, try Dursban® pesticide.

Brown Patch

(Rhizoctonia Blight)

**Problem:** A hot-weather fungus that produces circular patches of discolored turf with a “smoke ring” of gray or purple that disappears later in the day.  
**Solution:** Avoid excessive use of nitrogen before hot weather and eliminate thatch build-up. Use fungicide if necessary.

Sod Webworm

**Problem:** The adult moth does not damage turf, but it lays its eggs there. Caterpillars emerge in early spring, tunnel under thatch by day and eat grass blades at night. Damage appears as small dead patches in lawn, typically on sunny, steep slopes where it is hot and dry. Often mistaken for heat/drought stress.  
**Solution:** Select an insect-resistant seed blend. Fertilize and water and you may not need to use insecticides that can also destroy natural predators of sod webworms.

Necrotic Ring Spot

**Problem:** A serious fungus where decomposition of thatch results in sunken or depressed areas. Difficult to control.  
**Solution:** De-thatch, avoid excessive use of nitrogen in spring, aerate. Use frequent, light waterings to keep top 1/2 to 2 inches of soil moist. Use fungicide if necessary before damage is too severe. Reseed with disease-resistant seed mix.
**Cutworms**

**Problem:** Gray or dull brown fat caterpillars that destroy young plants by cutting them off at the soil line.

**Solution:** Implement treatments with an insecticide as soon as cutworm activity is noticed and before substantial losses occur.

---

**Billbugs**

**Problem:** Larvae eat grass blades resulting in small, dead patches that look like dollar spot. To diagnose, pull up turf. If stalks break easily at ground level and stems are hollowed out or packed with sawdust, billbugs may be the reason.

**Solution:** Billbugs are difficult to destroy because they have armor-like bodies and do not readily absorb insecticide. The best way to treat billbugs is to avoid them altogether by selecting insect-resistant seed blends.

---

**Gray Leaf Spot**

**Problem:** This fungus emerges in hot, humid, dry weather creating reddish-brown spots on turf. Tiny pinprick lesions quickly turn into round and oval spots that elongate the length of the leaf blade. Later, turf looks scorched and twisted. Easily confused with other diseases. Gray Leaf Spot progresses rapidly and large areas of turf can be lost within days.

**Solution:** Use a product with resistance to Gray Leaf Spot.

---

**Dog Spots**

**Problem:** Brown circles that resemble Dollar Spot or Brown Patch. Caused by dog urine.

**Solution:** Heavy watering will dilute excess salts and allow grass to recover.

---

**Summer Patch**

**Problem:** This root-infecting fungus emerges during hot, humid or wet weather in stressed turf in poorly drained soil. Easily confused with other diseases, it appears similar to necrotic ring spot.

**Solution:** The best solution is to establish disease-resistant grass, aerate and assure good drainage. Use slow-release nitrogen fertilizer and deep irrigation. Fungicides will need to penetrate roots.

---

**Leaf Spot**

**Problem:** Small red ovals that develop tan centers of dead tissue with dark borders (eye spots), eventually blighting crowns and roots (melting out). Leaf spot fungi are present in most lawns, but tend to infect mowing wounds during prolonged hot, wet weather.

**Solution:** Avoid excessive early spring nitrogen application. Water infrequently and deeply. Reseed with disease-resistant seeds. Use fungicide only in extreme cases.
White Grub

Problem: These C-shaped larvae of scarab beetles eat the roots of plants, producing damage similar to drought stress. Tunneling larvae are an invitation to moles and other predatory mammals in search of a meal.

Solution: Grubs require moisture for eggs to hatch. Water grub infested areas as little as possible in late July and early August. Use preventive pesticides as necessary.

Wear-and-Tear from Play

Problem: Compacted soil and bare spots under playground equipment or along unpaved paths.

Solution: The best solution is to aerate and reseed with seed blends specifically designed to withstand high traffic or wear and tear.

Drought or Heat Stress

Problem: During periods of prolonged hot weather, surface soil can harden, making moisture penetration increasingly difficult. Without moisture, the roots cannot carry nutrients to the grass. The weaker the turf becomes, the more likely it will be overtaken by weeds and disease.

Solution: A wetting agent or surfactant will help break down the barriers that repel water and allow it to enter the soil.

Roundup® Spots

Problem: While it’s effective for killing weeds, Roundup® is a non-selective herbicide, which means it will kill any plant it comes in contact with, including turf grass. The results can be dead patches of turf.

Solution: Reseed areas where spots have developed due to Roundup® use.
Identifying Common Weeds

Crabgrass

**Problem:** Thrives in under-fertilized lawns that are mowed too low.

**Solution:** Apply corn gluten meal in spring, water and fertilize regularly, mow high.

Dandelions

**Problem:** Thrives in thin, under-fertilized lawns.

**Solution:** Kill before flower matures and spreads seeds. Must remove entire root. Apply broadleaf herbicide in fall.

Nut Grass

**Problem:** Bright green grass that grows at warp speed.

**Solution:** Nut grass thrives in poor, compact soil, so enrich the soil and fertilize. Halosulfuron is usually applied by a professional.

Moss

**Problem:** Spreads through spores. Culprits are typically acidic soil, too little sunlight, too wet, too bare, shallow rocky soil, not enough fertilizer.

**Solution:** Perform soil test, adjust pH, aerate, grade to allow drainage, reseed with shade tolerant seed blend.

Dallisgrass

**Problem:** Long, wide-leaf, white-green grass that forms dense mats. Thrives in under-fertilized lawns.

**Solution:** Post-emergent herbicide.

Quackgrass

**Problem:** Reproduces by seed or rhizomes (underground stems). Does not respond to selective herbicides.

**Solution:** A non-selective herbicide such as Roundup®. However, Roundup® will kill any plant it comes in contact with, including turf grass.

Nimblewill

**Problem:** Long, wide-leaf, white-green grass that forms dense mats. Thrives in under-fertilized lawns.

**Solution:** Post-emergent herbicide.
Identifying Common Weeds

Bedstraw
Creeping Bindweed
Black Medic
Virginia Buttonweed

Common Chickweed
Mouseear Cinquefoil
White Clover
Dandelion

False Dandelion
Day Flower
Purple Deadnettle
Dog Fennel
Dollarweed/Pennywort

Wild Garlic
Ground Ivy
Henbit
Prostrate Knotweed
Lawn Burweed

Common Lespedez
Common Mallow
Matchweed
Pineappleweed
Broadleaf Plantain
Buckhorn Poison Poison Prickly Puncture
Plantain Ivy Oak Lettuce Vine
Purslane Floriday Pusley Pennsylvania Sheep Spurge
Purslane Pusley Smartweed Sorrel
Thistle Veronica Wild Geranium Strawberry Violet
Wood sorrel Wild Wild Yellow Rocket Foxtail
(Oxalis) Strawberry Nutsedge
Goosegrass Yellow Nutsedge