



PREFERRED SEED

Preferred Seed, Preferred Results

**575 KENNEDY ROAD
BUFFALO, NY 14227
PHONE 716-895-SEED (7333)
TOLL FREE 877-417-SEED (7333)
FAX 716-895-3421
EMAIL info@preferredseed.com
WEB www.preferredseed.com**

WE CARRY A FULL LINE OF:

- **LAWN SEED**
- **FERTILIZERS**
- **HYDROSEEDING SUPPLIES**
- **EROSION BLANKETS**
- **D.O.T. MIXTURES**
- **NATIVE / WETLAND SEED**

The Preferred Seed Staff



Chris Ehrenreich



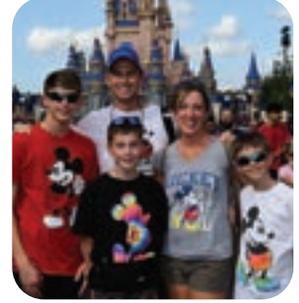
Mike Diehl



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Katrina Burgasser



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To Our Valued Customers

It is our pleasure to present this 2023 Turf Reference Manual to you. We have attempted to offer you the best products available. We are constantly evaluating and updating new varieties. If you would like a product not listed, please contact us. Our goal is providing you with top performing products to support your successful business.



Brian Conn



David Harning

How to Order

Call: **716-895-SEED (7333)** or
877-417-SEED (7333)

Fax: 716-895-3421

Email: info@preferredseed.com

Web: www.preferredseed.com

Prices

Prices are subject to change without notice.

Wholesale

The products contained in this catalog are available to the wholesale turf and forage industry only.

Hours of Operation

FEBRUARY 1 – MARCH 14

Monday – Friday 7am - 4pm

MARCH 15 – JUNE 30

Monday – Friday 7am - 5pm

Saturdays Upon Request

JULY 1 – OCTOBER 31

Monday – Friday 7am - 4pm

NOVEMBER 1 – JANUARY 31

Monday – Friday 7am - 3:30pm

Delivery

We deliver to all points in New York, Pennsylvania, Ohio, Vermont, Massachusetts, Maine, Connecticut, New Jersey and Rhode Island. We use all methods of transportation including private carriers, common carriers, leased trucks and vendor trucks. Minimum orders for free delivery vary among the products we sell and the delivery location.




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 BUFFALO, NEW YORK 14227

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What You May Not Know...

Certification of seed lots is something that is done to assure the buyer of the type and quality of seed. Certification guarantees the purity of the cultivar, fewer weed seeds, lower other crop contaminants and inert fillers. Certified seed lots are identified by a Blue Certification Tag.

Our Mission

Our mission is to provide you with the highest quality products with leading edge technology and exceptional customer service. Our mission is supported by our membership in the following organizations:

- AMERICAN FORAGE & GRASSLANDS COUNCIL
- AMERICAN SEED TRADE ASSOCIATION
- ATLANTIC SEED ASSOCIATION
- ERIE COUNTY COOPERATIVE EXTENSION
- GOLF COURSE SUPERINTENDENTS ASSOCIATION
- NATIONAL ALFALFA AND FORAGE ALLIANCE
- NEW YORK STATE AGRI-BUSINESS ASSOCIATION
- NEW YORK STATE NURSERY AND LANDSCAPE ASSOCIATION
- NEW YORK STATE TURFGRASS ASSOCIATION
- NEW YORK STATE FARM BUREAU
- NORTHEAST ORGANIC FARMING ASSOCIATION
- PLANT GFLX
- PLANT WNY
- SPORTS TURF MANAGERS OF NEW YORK
- UNITED STATES GOLF ASSOCIATION
- WESTERN SEED ASSOCIATION

NOTICE TO BUYER: EXCLUSION OF WARRANTY AND LIMITATION OF LIABILITY

Preferred Seed Co., Inc. warrants that this seed has been labeled as required by State and Federal Seed Laws and conforms to the label within recognized tolerances. THIS WARRANTY EXCLUDES ALL OTHER EXPRESS OR IMPLIED WARRANTIES INCLUDING ANY WARRANTY OF MERCHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE. SELLER MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING YIELD, QUALITY OR TOLERANCE TO INSECTS, DISEASES OR GROWING CONDITIONS OF THE SEED OR THE CROP PRODUCED THEREFROM. The seller's LIABILITY, to the buyer and others, is LIMITED TO A REFUND OF THE PURCHASE PRICE OF THE SEEDS. THIS REMEDY IS EXCLUSIVE. IN NO EVENT SHALL WE BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING LOSS OF PROFITS. To assert a claim, the reason for the claim must have been reported in writing to Preferred Seed Company, Inc. within 60 days of the claimant's discovery thereof. IF BUYER CHOOSES NOT TO BE BOUND TO THE ABOVE STATED WARRANTY TERMS, HE MAY RETURN THE SEED, AT HIS SOLE EXPENSE, IN UNOPENED CONTAINERS WITHIN 10 DAYS OF RECEIPT. **TITLE AND RISK OF LOSS PASS AT POINT OF SHIPMENT.**

Cornell Classic Mix

Meets the Cornell University Specifications for a High Quality Upstate New York Lawn.

- 70% Blend of 3 Elite Kentucky Bluegrasses
- 20% Improved Perennial Ryegrass
- 10% Improved Creeping Red Fescue

SEEDING RATE: 3#/1,000 SQ. FT.
SIZE: 25# BAG, 5/10# POLY, 12/3# POLY, 24/1# POLY

50/50 Fairway/Sports Supreme Mix

Ideal for short-cut golf course fairways, roughs and elite sports fields.

- 50% Blend of 3 Improved Perennial Ryegrasses
- 50% Blend of 3 Elite Kentucky Bluegrasses

SEEDING RATE: 4#/1,000 SQ. FT.
SIZE: 25# BAG

50/50 Sports/Sunny Mix

Recommended for sunny areas and athletic fields.

- 50% Blend of 3 Improved Kentucky Bluegrasses
- 50% Blend of 3 Improved Perennial Ryegrasses

SEEDING RATE: 4#/1,000 SQ. FT.
SIZE: 50# BAG, 25# BAG, 5/10# POLY, 12/3# POLY, 24/1# POLY

Trio Supreme Mix

Improved drought tolerance and disease resistance over Trio.

- 34% Blend of 3 Improved Perennial Ryegrasses
- 33% Blend of Improved Chewings Fescue, Creeping Red Fescue and Hard Fescue
- 33% Blend of 3 Improved Kentucky Bluegrasses

SEEDING RATE: 5#/1,000 SQ. FT.
SIZE: 25# BAG, 5/10# POLY, 12/3# POLY, 24/1# POLY

Trio Mix

Our most popular mix. Combination for sun and shade areas.

- 34% Blend of 3 Improved Perennial Ryegrasses
- 33% Creeping Red Fescue
- 33% Kentucky Bluegrass

SEEDING RATE: 5#/1,000 SQ. FT.
SIZE: 50# BAG, 25# BAG, 5/10# POLY, 12/3# POLY, 24/1# POLY

Reliable Mix

Quicker establishment than Trio Mix.

- 50% Blend of 3 Improved Perennial Ryegrasses
- 25% Kentucky Bluegrass
- 25% Creeping Red Fescue

SEEDING RATE: 6#/1,000 SQ. FT.
SIZE: 50# BAG, 25# BAG

Kwik Green Mix

Improved germination for non-irrigated seedings.

- 50% Blend of 3 Improved Perennial Ryegrasses
- 20% Annual Ryegrass
- 15% Creeping Red Fescue
- 15% Kentucky Bluegrass

SEEDING RATE: 6#/1,000 SQ. FT.
SIZE: 50# BAG, 25# BAG

Par Four Perennial Rye Blend

Recommended for over-seeding.

- 100% Blend of 4 Improved Perennial Ryegrasses

SEEDING RATE: 7#/1,000 SQ. FT.
SIZE: 25# BAG, 5/10# POLY, 12/3# POLY, 24/1# POLY

Practice Tee Divot Mix

For quick establishment and self repair potential.

- 90% Blend of 4 Improved Perennial Ryegrasses
- 10% Creeping Bentgrass

SEEDING RATE: 10#/1,000 SQ. FT.
SIZE: 25# BAG

Golf Low-Gro Mix

Improved playability and erosion control.

- 30% Improved Hard Fescue
- 50% Improved Sheep Fescue
- 20% Improved Turf Type Annual Ryegrasses

SEEDING RATE: 6#/1,000 SQ. FT.
SIZE: 25# BAG

Low-Gro Mix

Low maintenance, low growing.

- 30% Improved Hard Fescue
- 50% Improved Sheep Fescue
- 20% Improved Chewings Fescue

SEEDING RATE: 6#/1,000 SQ. FT.
SIZE: 25# BAG

Summer Green Supreme Mix

Drought, wear, and salt tolerance with a Kentucky Bluegrass appearance.

- 75% Blend of 4 Improved Turf Type Tall Fescues
- 10% Improved Perennial Ryegrass
- 10% Improved Turf Type Annual Ryegrass
- 5% Improved Kentucky Bluegrass

SEEDING RATE: 8#/1,000 SQ. FT.
SIZE: 50# BAG, 25# BAG, 5/10# POLY, 12/3# POLY, 24/1# POLY

Shady Supreme Mix

The shade problem solver.

- 25% Improved Chewings Fescue
- 25% Improved Creeping Red Fescue
- 20% Improved Hard Fescue
- 20% Improved Perennial Ryegrass
- 10% Improved Poa Trivialis

SEEDING RATE: 4#/1,000 SQ. FT.
SIZE: 25# BAG, 5/10# POLY, 12/3# POLY, 24/1# POLY

Shady Mix

Inexpensive shady mix.

- 35% Creeping Red Fescue
- 35% Chewings Fescue
- 30% Improved Perennial Ryegrass

SEEDING RATE: 6#/1,000 SQ. FT.
SIZE: 25# BAG, 5/10# POLY, 12/3# POLY, 24/1# POLY

Landscape Mix

Inexpensive lawn option.

- 40% Annual Ryegrass
- 25% Perennial Ryegrass
- 25% Creeping Red Fescue
- 10% 98/85 Kentucky Bluegrass

SEEDING RATE: 7#/1,000 SQ. FT.
SIZE: 25# BAG, 5/10# POLY, 12/3# POLY

Contractors Mix

Quick cover on disturbed sites.

- 70% Annual Ryegrass
- 20% Perennial Ryegrass
- 10% Creeping Red Fescue

SEEDING RATE: 7#/1,000 SQ. FT.
SIZE: 50# BAG

Conservation Mix

For reclamation sites.

- 25% Tall Fescue
- 20% Annual Ryegrass
- 20% Timothy
- 18% Creeping Red Fescue
- 10% Perennial Ryegrass
- 3% Forage Kentucky Bluegrass
- 2% White Clover
- 2% Birdsfoot Trefoil

SEEDING RATE:
3#/1,000 SQ. FT. RECLAMATION SITES
6#/1,000 SQ. FT. NEW LAWNS
SIZE: 50# BAG, 25# BAG

Application Recommendations for Preferred Seed Mixes

	Seeding Rate/1000 sq ft	Residential	Commercial	Athletic	Shade	Slopes	High Traffic	Quick Cover	Water Requirement	Fertilizer Req.
Cornell Classic Mix	3	E	VG	VG	F	G	VG	P	H	H
50/50 Fairway/Sports Supreme Mix	4	E	VG	E	P	VG	E	G	H	H
50/50 Sports/Sunny Mix	4	VG	VG	VG	P	VG	E	G	M	H
Trio Supreme Mix	5	E	E	G	G	G	G	G	M	M
Trio Mix	5	VG	E	G	G	G	G	G	M	M
Reliable Mix	6	VG	E	G	F	G	VG	VG	M	M
Par Four Mix	7	NR	NR	E*	P	P	E	E	M	H
Golf Low-Gro Mix	6	G	G	NR	E	E	NR	F	L	L
Low-Gro Mix	6	G	G	NR	E	E	NR	NR	L	L
Summer Green Supreme Mix	8	E	E	E	G	VG	E	VG	L	L
Kwik Green Mix	6	G	E	G	P	VG	VG	VG	L	L
Shady Supreme Mix	4	E	NR	P	E	E	P	F	L	L
Shady Mix	6	VG	NR	P	VG	VG	P	G	L	L
Landscape Mix	7	P	F	P	F	G	P	E	L	L
Contractors Mix	7	P	F	P	F	G	P	E	L	L
Conservation Mix	3 to 6	NR	NR	NR	VG	E	NR	E	L	L

E = excellent VG = very good G = good F = fair
 P = poor H = high M = medium L = low
 NR = not recommended *overseeding

Preferred Bulk Seed Display Program

*Minimum initial order of color coded display seed, \$1200

CHOOSE THREE (25 lb. bags):

- Trio Mix (red)
- Cornell Classic Mix (blue)
- Shady Supreme Mix (green)
- Par Four Perennial Ryegrass Blend (no color)

PREFERRED SEED WILL PROVIDE:

- FREE use of Preferred Bulk Seed Display for the season (53”h x 48”w x 24”d)
- FREE poly bags to package seed
- NO reorder minimums



Private Label Grass Seed

Promote your business by placing your logo on a Private Label Package!

RESEALABLE LAMINATED PACKAGES WITH FULL COLOR PHOTOGRAPH AND BOTTOM GUSSET:

- Sizes: 1lb., 3 lb., and 10 lb. (4 colors available)
- Matching 20 lb., 25 lb. and 50 lb. laminated woven poly bag

Pack Quantities:

24 - 1 lb. per bale
 12 - 3 lb. per bale
 5 - 10 lb. per bale

RESEALABLE 7 LB. GRASS SEED BUCKET:

- 80 - 7 lb. buckets per pallet

48-7 lb. bucket orders available with a private label order totaling 500 lbs. or more!



Retail Products

Poa pratensis

"The most important and widely used Northern turfgrass."

GENERAL SPECIFICATIONS:

21-28 DAYS TO GERMINATE
SEEDING RATE: 2-3 lbs./1,000 sq. ft.
Approx. number of seeds per lb: 2,100,000

NEW! Blue Magic KENTUCKY BLUEGRASS..... 50 lbs.
An America type with the color of a Midnight

- Very good traffic tolerance
- A top performer in 2020 NTEP in the northeast
- Very good stem rust resistance



NEW! Starr KENTUCKY BLUEGRASS..... 50 lbs.
Topped the charts at the 2017 NTEP trials

- Excellent seedling vigor
- Medium dark color
- Good stem rust resistance
- Excellent summer patch resistance
- Midnight type
- Top 5 of 2020 northeast NTEP



Turf grass cultivars with superior drought tolerance with as much as 21 day delays in the onset of drought stress symptoms



Bewitched..... 50 lbs.
KENTUCKY BLUEGRASS

Top scores in current NTEP trials for turf quality and wear tolerance

- Near perfect resistance to dollar spot, leaf spot and stem rust
- Tops in NTEP shade trial
- Excellent dark green color
- Compact growth habit excellent for use in low mowing environments



Mercury..... 50 lbs.
KENTUCKY BLUEGRASS

High shear strength needed from its father, P-105

- Excellent Summer Patch and Rust resistance
- Above average seedling vigor and establishment
- Very good summer stress tolerance



Everest..... 50 lbs.
KENTUCKY BLUEGRASS

Outstanding in disease trials

- Excellent sod strength
- Dark green color
- Good in partial shade



Midnight..... 50 lbs.
KENTUCKY BLUEGRASS

Rated top variety overall for NTEP 1996-2000

- Very dark green color
- Excellent low-mowing performance
- Very high tiller density
- AQUA WISE approved (drought tolerant)



Brooklawn..... 50 lbs.
KENTUCKY BLUEGRASS

A good value for low-maintenance athletic fields

- Very good drought tolerance
- Good performer in shade trials
- Good seedling vigor
- Excellent spring and summer density
- Excellent sod strength



Wild Horse..... 50 lbs.
KENTUCKY BLUEGRASS

Aggressive and rapid germination

- Excellent disease resistance
- High tiller density
- Good spring green-up



Bonaire..... 50 lbs.

KENTUCKY BLUEGRASS

Versatile performer in all conditions for all locations

- Quick establishment
- Dark green color and good spring vigor
- Excellent rhizome development for sod production
- Very good resistance to rust, striped smut and leaf spot diseases



Baron..... 50 lbs.

KENTUCKY BLUEGRASS

A proven performer for many years

- Very good in low maintenance situations
- Good disease resistance
- Excellent sod tensile strength for durability



Shamrock..... 50 lbs.

KENTUCKY BLUEGRASS

Developed with quick establishment in mind

- Wear tolerant
- Exceptional persistence
- Early spring green-up



Better Blue

Better Blue..... 25 lbs.

KENTUCKY BLUEGRASS BLEND

A blend of three Elite/Low cut Kentucky Bluegrasses

- 35% Bewitched Kentucky Bluegrass
- 35% Starr Kentucky Bluegrass
- 30% Blue Magic Kentucky Bluegrass

Also available in 5/10# POLY, 12/3# POLY, 24/1# POLY.

Kenblue Bluegrass..... 50 lbs.,
(98/85)

First introduced from Europe in the 1600's

- Susceptible to all turf diseases
- Wider, coarser blade compared to improved varieties
- Noticeably lighter green than the improved varieties listed

Kentucky Bluegrass

6 KENTUCKY BLUEGRASS

Poa pratensis

	COLOR	SPRING GREENUP	LEAF TEXTURE	WEAR TOLERANCE	SEEDLING VIGOR	DROUGHT (MILT)	TYPHLA BLIGHT	LEAF SPOT	STEM RUST	DOLLAR SPOT	RED THREAD	BROWN PATCH	SUMMER PATCH	PINK SNOW MOLD	TYPE
Baron	3	F	M	VG	G	F	VG	VG	F	VG	G	F	F	VG	BVMG
Bewitched	5	F	M	E	G	VG	E	E	VG	E	E	G	P	VG	Compact
Blue Magic	5	G	M	VG					VG	VG			E		America
Bonaire	4	G	F	F	G	VG	G	VG	VG	E	G	G	G	E	Shamrock
Brooklawn	2	VG	F	F	G	VG	E	VG	VG	VG	G	VG	G	VG	Shamrock
Everest	5	P	F	E	G	VG	E	E	G	VG	E	VG	VG	F	Midnight
KenBlue	1	VG	VF	F	VG	G	P	P	VG	G	G	P	F	P	Common
Mercury	3	VG	M	G	VG	VG	E	G	G	VG	VG	G	G	F	America
Midnight	5	P	F	VG	VG	VG	E	E	F	VG	F	G	E	G	Midnight
Shamrock	3	E	M	G	G	G	G	G	F	G	VG	G	P	E	Shamrock
Starr	4	G	F		E				G	VG			E		Midnight
Wildhorse	2	E	F	VG	VG	G	G	G	F	G	VG	G	P	E	Shamrock

E = excellent
 VG = very good
 G = good
 F = fair
 P = poor

Leaf Texture Ratings Only:

M = medium
 F = fine
 VF = very fine

Color:

5 = darkest
 1 = lightest

National Turfgrass Evaluation Program

Mean Turfgrass Quality Ratings of Kentucky Bluegrass Cultivars Grown at two locations in the U.S. Maintained Using "Schedule A" 2006-10 Final Report

NAME	MEAN		MEAN		MEAN
Midnight	6.8	Gladstone	6.2	Blueberry	5.7
Impact	6.7	Rhythm	6.2	Futurity	5.7
NuGlade	6.7	Everglade	6.1	Yankee	5.7
Zinfandel	6.6	Washington II	6.1	Baron	5.6
NuDestiny	6.6	Bewitched	6.1	Skye	5.6
NuChicago	6.5	Barrister	6.1	Shiraz	5.6
Diva	6.5	Juliet	6.1	Argos	5.6
Beyond	6.5	Ginney II	6.1	Emblem	5.6
Avid	6.5	Belissimo	6.0	Moonlight SLT	5.5
Bluestone	6.4	Everest	6.0	Jump Start	5.5
Alexa II	6.4	Gaelic II	6.0	Pinot	5.5
Solar Eclipse	6.4	Wild Horse	5.9	Armada	5.5
Harmonie	6.4	Glenmont	5.9	Shamrock	5.5
Washington	6.4	Dynamo	5.9	Aura	5.5
Sudden Impact	6.4	Blue Note	5.9	Madison	5.4
Award	6.3	Arrowhead	5.9	Bariris	5.4
Excursion	6.3	STR 2485	5.9	Bandera	5.4
Granite	6.3	Hampton	5.8	Mystere	5.2
Empire	6.2	Aries	5.8	Aviator	5.1
Touche	6.2	Starburst	5.8	Volt	5.0
Rhapsody	6.2	America	5.8	Barrari	5.0
4-Season	6.2	Prosperity	5.8	Barduke	4.9
Sombrero	6.2	Rugby II	5.8	Corsair	4.7
		Julia	5.8	Kenblue	4.1
				LSD Value	1.0

TURFGRASS QUALITY RATINGS 1-9; 9 = Ideal Turf

*SCHEDULE A: 0.4-0.6 inch mowing height; 3-4 lbs. N/1000 square feet/year; irrigation to prevent stress; fungicides applied only to prevent severe stand loss; insecticides applied only to prevent stand loss; weed control applied as needed to prevent stand loss





National Turfgrass Evaluation Program

Mean Turfgrass Quality Ratings of Kentucky Bluegrass Cultivars Grown at five locations in the Northeast Region 2006-10 Final Report

NAME	SCHEDULE C	SCHEDULE B	SCHEDULE B	SCHEDULE B	SCHEDULE B	MEAN	NAME	SCHEDULE C	SCHEDULE B	SCHEDULE B	SCHEDULE B	SCHEDULE B	MEAN
	MA1	NJ1	NJ2	NY1	PA1			MA1	NJ1	NJ2	NY1	PA1	
Impact	5.6	7.3	6.1	3.8	7.1	6.1	Touche	5.4	5.7	5.3	4.1	6.3	5.5
Bewitched	6.0	6.1	6.1	4.0	7.5	6.0	Belissimo	5.6	6.0	4.9	3.3	6.9	5.4
Everest	5.5	7.0	6.1	3.6	7.1	6.0	Rugby II	5.5	5.9	5.2	4.0	6.2	5.4
Solar Eclipse	5.5	6.9	6.3	3.1	7.5	6.0	Washington	5.5	5.6	5.3	3.7	6.3	5.4
Alexa II	5.4	7.0	6.0	3.3	7.5	6.0	4-Season	5.4	4.9	5.5	3.8	6.8	5.4
Award	5.7	7.0	6.3	3.6	6.8	6.0	Juliet	5.3	5.3	5.3	3.8	6.7	5.4
Excursion	5.5	7.6	5.7	3.8	6.8	6.0	Empire	5.8	4.5	5.1	3.7	7.0	5.3
Blue Note	5.8	6.3	5.7	4.1	7.4	6.0	Arrowhead	5.5	5.6	4.7	3.8	6.7	5.3
Everglade	5.7	7.1	6.0	3.2	7.0	5.9	America	5.8	5.1	5.2	4.0	6.1	5.3
Sudden Impact	5.6	7.1	5.8	3.5	7.1	5.9	Aries	5.5	5.6	5.0	3.4	6.5	5.3
Blueberry	5.6	6.5	6.0	4.1	6.9	5.9	Gladstone	5.2	5.3	5.4	4.0	6.2	5.3
Midnight	5.4	7.2	5.9	3.1	7.1	5.9	Wild Horse	5.4	5.2	5.0	3.9	6.4	5.3
NuChicago	5.5	6.5	6.1	3.8	7.1	5.9	Jump Start	5.3	5.4	5.3	3.8	6.0	5.2
Diva	6.0	6.1	5.9	3.6	7.1	5.9	Washington II	5.4	5.3	5.2	3.5	6.3	5.2
Ginney II	5.5	6.8	6.1	3.3	6.9	5.8	Armada	5.3	4.7	5.1	3.7	6.8	5.2
NuDestiny	5.3	7.3	5.9	3.4	6.7	5.8	Pinot	5.4	4.8	4.7	3.8	6.9	5.2
Emblem	5.1	6.2	6.4	3.4	7.3	5.8	Moonlight SLT	5.0	4.3	5.7	3.9	6.6	5.2
Granite	5.1	7.0	5.8	3.5	7.0	5.8	Shamrock	5.4	5.0	4.8	3.8	6.5	5.2
Hampton	5.9	5.8	6.4	3.1	7.0	5.8	Madison	5.6	4.8	4.8	3.9	6.2	5.1
Prosperity	5.4	5.6	6.5	3.6	7.2	5.8	Sombrero	5.3	5.1	4.9	3.4	6.4	5.1
Rhapsody	5.8	5.8	5.7	3.6	7.3	5.7	Julia	5.3	4.9	5.1	3.9	6.1	5.1
Barrister	5.6	6.3	5.5	4.2	6.7	5.7	Greenteam	5.1	5.0	4.9	3.9	6.4	5.1
Skye	5.5	6.8	5.9	3.4	6.5	5.7	Gaelic	5.5	5.0	4.7	3.7	6.3	5.1
Rhythm	5.4	6.1	5.8	3.8	6.9	5.7	Volt	5.4	4.8	4.8	3.7	6.3	5.1
Shiraz	5.4	5.7	5.9	4.2	6.9	5.7	Dynamo	5.3	4.2	5.1	3.5	6.7	5.0
Avid	6.1	4.8	5.9	3.9	7.3	5.7	Harmonie	5.3	4.5	4.9	3.4	6.2	5.0
NuGlade	5.6	6.1	5.6	3.1	7.2	5.7	Bariris	5.0	5.3	4.7	3.6	5.9	5.0
Starburst	5.4	5.9	5.4	4.5	6.5	5.6	Ravel	5.0	5.4	4.5	3.2	6.1	4.9
Beyond	5.5	6.3	5.6	3.8	6.4	5.6	Corsair	5.0	4.8	4.3	3.6	6.2	4.8
Bluestone	5.2	6.4	5.6	3.4	6.7	5.6	Barrari	5.0	5.0	4.5	3.3	5.8	4.8
Argos	5.7	5.6	5.7	3.4	6.8	5.6	Bar VV	4.7	5.4	4.4	3.6	5.6	4.8
Zinfandel	6.0	4.7	5.8	3.7	7.1	5.5	Baron	5.2	4.5	4.4	3.1	6.1	4.8
Glenmont	5.4	5.3	5.3	4.1	7.1	5.5	Bandera	4.9	4.4	3.9	3.6	6.2	4.7
Arur	5.6	6.1	5.5	3.7	6.3	5.5	Aviator	5.0	4.3	4.2	3.4	5.8	4.6
Rubicon	5.6	6.3	5.2	3.8	6.1	5.5	Barduke	4.9	4.7	4.3	3.4	5.4	4.6
Mystere	5.6	5.9	5.4	3.6	6.6	5.5	Reveille	3.9	4.5	3.8	3.7	4.9	4.2
Futurity	5.6	5.2	5.6	3.8	6.9	5.5	Mermaid	4.4	4.5	3.2	3.7	5.0	4.2
Yankee	5.5	5.7	5.8	3.6	6.5	5.5	Kenblue	4.0	3.3	2.9	3.5	4.6	3.7
							LSD VALUE	0.6	1.6	0.9	1.1	1.0	0.5

We have expanded this chart to include Schedule B and C.

TURFGRASS QUALITY RATINGS 1-9; 9 = Ideal Turf

*SCHEDULE B: 1-2 inch mowing height; 3-4 lbs. N/1000 square feet/year; irrigation to prevent dormancy; fungicides applied only to prevent severe stand loss; insecticides applied only to prevent stand loss; weed control applied as needed to prevent stand loss

**SCHEDULE C - 2.5-3.5 inch mowing height: 0-2 lbs. N/1000 sq. ft per year:

No irrigation after establishment or to prevent dormancy:

No fungicides applied: No insecticides applied

Weed control applied as needed to prevent stand loss

Kentucky Bluegrass

8 RYEGRASS

Lolium perenne / Lolium multiflorum

*"Fast germination,
permanent and
attractive."*

Paradox GLR PERENNIAL RYEGRASS..... 50 lbs.

Remarkable performance under traffic

- One of the top varieties for spring greenup
- Resistant to grey leaf spot
- High seed count due to smaller seed



GENERAL SPECIFICATIONS:

7-10 DAYS TO GERMINATE

SEEDING RATE: 6-8 lbs./1,000 sq. ft.

Approx. number of seeds per lb: 227,000

Paragon 2 GLR PERENNIAL RYEGRASS..... 50 lbs.

In the top 4 of all varieties tested as grown in 5 locations

- At the top of NTEP ratings for drought tolerance
- Grey leaf spot resistance
- Smaller seeds resulting in increased seed count



Pangea GLR..... 50 lbs.

PERENNIAL RYEGRASS

Represents the accumulation of breeding efforts of more than 40 years

- Dark green color
- Heat and drought tolerant
- Resistant to Gray Leaf Spot



Sideways..... 50 lbs.

PERENNIAL RYEGRASS

Develops aggressive, strong spreading stolons at an early stage

- High drought tolerance
- High Gray Leaf Spot resistance
- Salt tolerance



Manhattan 7..... 50 lbs.

PERENNIAL RYEGRASS

7th generation in a long line of top performers

- Superior drought tolerance in the CTBT trial
- Gray Leaf Spot resistance
- A TWCA qualified variety



Evolution

Evolution..... 50 lbs.

PERENNIAL RYEGRASS

Great for a dense low cut lawn

- Top NTEP performer
- Excellent Gray Leaf Spot resistance
- Dense growth habit



Peridot

Peridot..... 50 lbs.

PERENNIAL RYEGRASS

Selected from Rutgers University for rapid spring green-up

- Dark green color
- Excellent wear tolerant
- Gray Leaf Spot and Crown Rust resistance
- Salt tolerant



Evolve

Evolve..... 50 lbs.

PERENNIAL RYEGRASS

High 2013 NTEP Mean turfgrass quality rating

- Superior wear tolerant
- Excellent seeding vigor
- Excellent Gray Leaf Spot resistance
- Widespread establishment



PHONE 716-895-SEED (7333)

TOLL FREE 877-417-SEED (7333)

FAX 716-895-3421



Evening Shade 50 lbs.
PERENNIAL RYEGRASS

A lower cost alternative to top rated NTEP Ryegrasses

- Good variety for blending and overseeding
- Great choice over common perennial ryegrass



Green Supreme 50 lbs.
PERENNIAL RYEGRASS

Superior drought and salt tolerance

- Excellent Gray Leaf Spot resistance
- Excellent spring green-up
- Dense, upright growth



Virte 50 lbs.
PERENNIAL RYEGRASS

High 2019 NTEP mean genetic color rating

- Aggressive radial tillering
- Dense growth habit
- Dark green color



PALMETTO
Palmetto Turf Type 50 lbs.
ANNUAL RYEGRASS

Annual characteristics with the look of a perennial

- Fine texture
- Dark green color
- Excellent transition

	COLOR	SPRING GREEN UP	LEAF TEXTURE	SEEDLING VIGOR	TRAFFIC	TYPHULA BLIGHT	LEAF SPOT	DOLLAR SPOT	RED THREAD	BROWN PATCH	PYTHIUM BLIGHT	CROWN RUST	GRAY LEAF SPOT	PINK SNOW MOLD	SEED HEAD RATINGS	DROUGHT STRESS
EVOLUTION	5	VG	F	VG	E	NR	NR	G	G	G	P	E	E	G	G	G
EVOLVE	3	G	F	VG	E	NR	NR	VG	E	VG	F	F	E	VG	F	E
GREEN SUPREME	4	VG	F	VG	VG	NR	NR	E	G	G	G	G	E	VG	VG	NR
MANHATTAN 7 GLR	4	VG	F	VG	G	VG	VG	VG	G	F	VG	VG	E	F	VG	NR
PANGEA GLR	5	E	F	G	F	G	E	G	F	VG	F	G	E	E	G	NR
PARADOX GLR	4	E	F	VG	E	NR	NR	NR	P	NR	NR	G	VG	VG	NR	VG
PARAGON 2 GLR	4	G	F	VG	E	NR	NR	NR	VG	NR	NR	VG	E	E	NR	G
PERIDOT	4	E	F	E	VG	NR	NR	NR	E	E	NR	E	VG	G	NR	G
SIDEWAYS	4	G	F	G	VG	G	G	G	VG	G	F	VG	E	F	G	NR
VIRTE	4	VG	F	G	VG	NR	NR	NR	VG	VG	NR	F	F	VG	NR	VG

E = excellent
 VG = very good
 G = good
 F = fair
 P = poor

Leaf Texture Ratings Only:
 F = fine
 M = medium
 W = wide

Color:
 5 = darkest
 1 = lightest

NR = no rating

Buyer Beware!

In New York State, seed companies are not required to list the percentage of fluorescence in Perennial Ryegrass. Fluorescence can indicate the presence of Annual Ryegrass in a Perennial Ryegrass lot. This is a natural occurrence which cannot be avoided, but can be minimized. At Preferred Seed Company, Inc., our standards are to reject any lot of Turf Type Perennial Ryegrass which contains excessive amounts of Fluorescence (Annual Ryegrass). It is possible to purchase seed lots which have in excess of 8% fluorescence at a cheaper price. We choose to not offer these substandard seed lots.

Perennial Ryegrass

Lolium perenne

National Turfgrass Evaluation Program

Mean Turfgrass Quality Ratings of Perennial Ryegrass Cultivars Grown at Three Locations in the Northeast Region 2011-2014 Data

TURFGRASS QUALITY RATINGS: 1-9; 9 = BEST

	MEAN		MEAN
Grand Slam GLD	6.3	Provost	5.5
Pangea GLR	6.1	SR4660ST	5.5
Aspire	6.1	Pillar	5.5
Bandalore	6.1	Hancock	5.4
Karma	6.1	Uno	5.4
Thrive	6.1	Vision	5.4
Green Supreme	6.0	Mach I	5.3
Rio Vista	6.0	Evolve	5.3
Rinovo	6.0	Sox Fan	5.3
Wicked	6.0	Monsieur	5.3
Riptide	5.9	Manhattan 6 GLR	5.2
Fiesta 4	5.9	Apple SGL	5.2
SR 4650	5.9	Insight	5.2
Evolution	5.9	Pepper	5.2
Metolius	5.9	Rainwater	5.2
Infusion GLX	5.8	Pacific Gem	5.2
Diligent	5.8	Salinas II	5.2
Pizzazz 2 GLR	5.7	Parkside	5.1
Benchmark	5.7	Allante	5.1
Sunstreaker	5.7	Bonneville	5.1
Octane	5.7	Haven	5.1
Amazing A+	5.7	Bar LP	5.1
Stellar 3GL	5.7	Seductive	4.9
Stamina	5.6	Vintage	4.8
Banfield	5.6	Excellence	4.8
Fastball RGL	5.6	Pistol	4.8
Sienna	5.6	Prominent	4.8
Sideways	5.5	Brightstar SLT	4.8
Premium	5.5	Playoff 2	4.7
Expedite	5.5	Pinnacle	4.0
Dominator	5.5	Linn	2.0
Pinnacle III	5.5	LSD VALUE	0.5
Palmer V	5.5		

Mean Turfgrass Quality Ratings Of Perennial Ryegrass Cultivars Grown At Two Locations In The Northeast Region, 2017-2021 Data

TURFGRASS QUALITY RATINGS: 1-9; 9 = BEST

	MEAN		MEAN
Furlong	6.6	Man O War	5.9
Stellar 4 GL	6.6	Gator Fore	5.9
Alloy	6.6	Ivy	5.9
Palmer Supreme	6.6	Paragon 2 GLR	5.8
Mystique	6.6	Seabiscuit	5.8
SR 4700	6.5	Grand Slam GLD	5.8
Peridot	6.4	Slider LS	5.8
Fiesta Cinco	6.3	SR 4650	5.7
Zoom 2	6.3	Starbright GLX	5.7
Sunburst	6.3	Silver Sport	5.7
Slugger 3 GL	6.3	Karma	5.5
Catalyst	6.3	Gray Hawk	5.4
Superstar GL	6.3	Derby Xtreme	5.4
Shield	6.2	Mensa	5.2
Elektra GLR	6.2	Allstar III	5.2
Mightier	6.2	Evolve	5.1
Gator Cinco	6.2	Virte	5.1
Homerun LS	6.2	Savant	5.1
Xcelerator	6.2	Saguaro	5.0
Allstar Fore	6.1	Belize 2	4.9
Umpqua	6.1	Tee-Me-Up	4.9
Pharaoh	6.1	Hatrick	4.8
Overdrive 5G	6.0	Pepper II	4.8
Swift	6.0	Green Supreme+	4.8
Signet	6.0	Nexus Gt	4.7
Apple 3 GL	6.0	Cayman	4.5
Gray Wolf	6.0	Fireball	4.4
Spike GLS	6.0	Brightstar SLT	4.3
Intense	6.0	Linn	2.3
Helios	6.0	LSD VALUE	0.5
Paradox GLR	5.9		
Fastball 3 GL	5.9		

CHEWINGS, SHEEP AND CREEPING RED FESCUES

Festuca rubra (FINE)

*"Shade tolerant,
drought resistant,
green all year."*



Intrigue 50 lbs. CHEWINGS FESCUE

A top rated Chewings Fescue in the 1999 NTEP trials for sun, shade and drought

- Dark green color
- Contains endophytes for insect resistance
- Great for low maintenance areas
- Excellent resistance to leaf spot
- Enhanced weed suppression (allelopathic)

Blue Mesa

Blue Mesa 50 lbs. SHEEP FESCUE

Blue Mesa can be used in wildflower plantings

- Blue-gray leaf color
- Quick spring green-up
- Lower input requirements



Class One 50 lbs. CREEPING RED FESCUE

Better traffic tolerance than most fine fescues

- Superior resistance to Dollar Spot and Red Thread
- Great choice for low maintenance areas
- Contains endophytes for insect resistance



SR 5130 50 lbs. CHEWINGS FINE FESCUE

The culmination of years of research at Rutgers University

- Excellent dollar spot resistance
- Highly rated for leaf spot
- High levels of endophytes



Quatro 50 lbs. SHEEP FESCUE

One of the slowest growing grasses

- Excellent in reduced maintenance
- Improved shade tolerance
- Establishes rapidly, grows slowly
- Dark color and drought tolerant



Celestial 50 lbs. CREEPING RED FESCUE

Shines under all conditions, even stress

- Dark green color
- Early spring green-up
- Improved resistance to leaf spot and red thread diseases
- Excellent low maintenance grass in sun or shade
- Best in summer and fall density of any Fine Fescue
- AQUAWISE approved (drought tolerant) and TWCA qualified

GENERAL SPECIFICATIONS:

FINE FESCUE: 14-21 DAYS TO GERMINATE
SEEDING RATE: 5-7 lbs./1,000 sq. ft.
Approx. number of seeds per lb: 546,000

TALL FESCUE: 10-14 DAYS TO GERMINATE
SEEDING RATE: 8-10 lbs./1,000 sq. ft.
Approx. number of seeds per lb: 227,000



Turf grass cultivars with superior drought tolerance with as much as 21 day delays in the onset of drought stress symptoms



Gibraltar Gold 50 lbs. STRONG CREEPING RED FESCUE

Strong Creeping Red Fescue released from Rutgers

- High endophyte
- Aggressive tillering



Nanook 50 lbs. HARD FESCUE

Greater shade tolerance than other species of Fine Fescue

- Great choice for low maintenance sites
- High disease resistance
- Slow growing for less mowing requirements
- Blue-green color
- AQUAWISE approved (drought tolerant) and TWCA qualified

Gladiator 50 lbs. HARD FESCUE

One of the new hard fescues exhibiting improved mowing qualities

- Top rated for drought tolerance
- #1 for overall quality 2016 data

Fescues





Double Take 50 lbs.

TALL FESCUE

Rated highly for lateral spread

- Brown patch resistant
- Dark green color
- Fine leaf texture



Traverse 2 SRP 50 lbs.

TALL FESCUE

The advanced self-repairing Tall Fescue

- Improved brown patch resistance
- Excellent shade tolerance
- High drought tolerance with dark color



Firewall 50 lbs.

TALL FESCUE

Excellent NTEP scores for drought stress

- Superior Resistance to Brown Patch
- Excellent Traffic Tolerance and Recovery
- High Density, High Turf Quality
- Summer Drought tolerance



4th Millennium SRP ... 50 lbs.

TALL FESCUE

Disease resistant, self-repairing Tall Fescue

- Performance in shade
- Excellent drought tolerance
- Top rated in Northeast NTEP quality trials



Rebounder 50 lbs.

TALL FESCUE

Great choice for high wear situations

- High brown patch resistance
- Aggressive tillering and early rhizome development
- Low mowing tolerance



Padre 2

Padre 2 50 lbs.

TALL FESCUE

Selected from Rutgers University breeding program

- Brown Patch resistant
- Dark green color
- Reduced growth habit
- Traffic tolerant



COPIOUS

Copious 50 lbs.

TALL FESCUE

Exhibits increased radial tillerings

- Dark green color
- Brown Patch resistance
- Excellent Gray Leaf Spot resistance
- Traffic tolerant



TECHNIQUE

Technique 50 lbs.

TALL FESCUE

- Dark green color
- Brown Patch & Pythium resistance
- Excellent traffic tolerance
- Superior density

Triple Play

Triple Play 50 lbs.

TALL FESCUE BLEND

- Contains 3 highly rated turf type tall fescues
- Great for overseeding



National Turfgrass Evaluation Program

*Mean Turfgrass Quality Ratings of Tall Fescue Cultivars Grown at Four Locations in the Northeast Region 2013-2017 Data

TURFGRASS QUALITY RATINGS 1-9; 9 = Ideal Turf

NAME	MEAN	NAME	MEAN
Regenerate	7.1	Foxhound	6.2
4th Millennium SRP	7.0	Embrace	6.2
Rebounder	6.9	Bullseye	6.2
Titanium 2LS	6.9	Hover	6.2
Met 1	6.9	Olympus	6.2
Thor	6.9	Xtender	6.2
Traverse 2 SRP	6.8	Grande 3	6.2
Raptor III	6.8	Houndog 8	6.2
Avenger II	6.8	Nightcrawler	6.1
Amity	6.8	Michelangelo	6.1
Reflection	6.8	Faith	6.1
Black Tail	6.8	Turfway	6.1
Firecracker SLS	6.7	Falcon V	6.1
Rockwell	6.7	Kingdom	6.1
Fayette	6.7	Rhizing Moon	6.1
Technique	6.6	Leonardo	6.0
Hemi	6.6	Meridian	6.0
Supersonic	6.6	Fesnova	6.0
Trinity	6.6	Unitus	5.9
Rowdy	6.6	Catalyst	5.9
Paramount	6.6	Thunderstruck	5.8
DoubleTake	6.5	Rebel V	5.8
Hot Rod	6.5	Ares	5.7
Standout	6.5	Saltillo	5.7
Crossfire 4	6.5	Dynamite LS	5.6
Screamer LS	6.5	Terrano	5.4
Valkyrie LS	6.5	Memphis	5.4
Firewall	6.4	Swagger	5.4
Rhambler 2 SRP	6.4	Caesar	5.4
Vert	6.4	Temptation	5.2
Met-3	6.4	Rain Dance	5.1
GTO	6.4	Falcon IV	5.1
Maestro	6.4	Annihilator	4.8
Firebird 2	6.3	Inspiration	4.8
Bloodhound	6.3	Frontline	4.7
Temple	6.3	Marauder	4.6
Trending	6.3	Aqueduct	4.4
Wichita	6.3	Warhawk	4.2
Diablo	6.3	KY-31	1.8

*Mean Turfgrass Quality Ratings of Tall Fescue Cultivars Grown at Four Locations in the Northeast Region 2021 Final Data

TURFGRASS QUALITY RATINGS 1-9; 9 = Ideal Turf

NAME	MEAN	NAME	MEAN
Daybreak	7.0	Bentley	6.0
Raptor LS	6.7	Estrena	6.0
Okeefe	6.7	Dragster	6.0
Zion	6.7	Hemi	5.9
Spyder 2 LS	6.6	Raptor III	5.9
Essential 2	6.6	Endgame	5.8
Gallardo	6.6	Fairfield	5.7
Titan GLX	6.6	Fayette	5.7
Firenza II	6.6	Firehawk SLT	5.7
Houndog Nine	6.6	Grande 3	5.6
Capitan	6.6	Copious	5.5
Serenade	6.5	Tough	5.5
Galactic	6.5	Tango	5.4
Firecracker G-LS	6.5	Gro-Pro	5.4
Tank	6.4	Lifeguard	5.4
Dynamite G-LS	6.4	Bravo 2	5.4
Teacher	6.4	Bullseye	5.3
Avenger III	6.4	Monument	5.3
Bullseye LTZ	6.4	Pro Gold	5.2
Rover	6.4	Birmingham	5.2
Stealth	6.4	Moondance GLX	5.2
Degas	6.4	5 Star	5.2
Bonfire	6.3	Naturally Green	5.0
Symphony	6.3	Turbo SS	5.0
Triad	6.3	Bandit	5.0
Titanium G-LS	6.3	Grand Prix	4.6
Bladerunner 3	6.3	Escalade	4.5
SR 8700	6.3	Palomar	4.4
Paramount	6.3	Kentucky-31	2.2
Talladega II	6.2		
Fastlane	6.2	LSD VALUE	0.5
Xanadu	6.2		
Raceway	6.2		
Titan Max	6.1		
Rowdier	6.1		
Padre 2	6.1		
Kizzle	6.0		
Glx Aced	6.0		

COLOR SHADE TRAFFIC SPRING GREEN UP
LEAF TEXTURE SPRING DENSITY DROUGHT
BROWN PATCH PINK SNOW MOLD
TYPHULA BLIGHT GRAY LEAF SPOT RHIZOMES

	COLOR	SHADE	TRAFFIC	SPRING GREEN UP	LEAF TEXTURE	SPRING DENSITY	DROUGHT	BROWN PATCH	PINK SNOW MOLD	TYPHULA BLIGHT	GRAY LEAF SPOT	RHIZOMES
4TH MILLENNIUM SRP	5	VG	VG	E	5	E	E	VG	VG	VG	VG	✓
COPIOUS	5	E	E	VG	4	VG	VG	F	E	VG	E	✓
DOUBLE TAKE	5	F	E	E	5	E	E	E	VG	G	G	✓
PADRE 2	4	E	E	VG	4	VG	VG	G	VG	VG	VG	✓
REBOUNDER	5	G	E	E	5	E	E	E	G	F	VG	✓
TECHNIQUE	4	VG	E	VG	5	E	VG	E	VG	VG	G	✓
TRAVERSE 2 SRP	5	E	VG	VG	5	E	E	E	VG	G	G	✓
KENTUCKY 31	1	F	P	E	1	P	P	G	E	F	F	

E = excellent
VG = very good
G = good
F = fair
P = poor

Leaf Texture Ratings Only:
5 = finest
1 = widest
Color:
5 = darkest
1 = lightest

Fescues

Agrostis palustris

"Primarily used on golf greens and fairways."

GENERAL SPECIFICATIONS:

7-14 DAYS TO GERMINATE
SEEDING RATE: 1-2 lbs./1,000 sq. ft.
Approx. number of seeds per lb: 6,000,000

NEW! Dominant Plus CREEPING BENTGRASS 25 lbs.
Excellent blend for overseeding

- Withstands extreme heat, cold and humidity
- Resistance to Pythium, Brown Patch and Dollar Spot
- Reduced thatch production



Luminary CREEPING BENTGRASS 25 lbs.
Developed at Rutgers University

- Medium green color
- Early spring green-up
- For use on greens and fairways




007 25 lbs.
CREEPING BENTGRASS
Dark green variety with excellent Poa Annua resistance

- Low scalp incidence
- Very good in low fungicide trials
- Rapid establishment



Declaration 25 lbs.
CREEPING BENTGRASS
Top ranked for overall turf quality and dollar spot resistance in NTEP trial on greens and fairways

- Excellent resistance to brown patch
- Ideal for fairways, greens and tees
- Top ranked: mowing quality and summer density



777 25 lbs.
CREEPING BENTGRASS
Product of 20 years of research at Rutgers University

- Excellent overall performer in recent NTEP Trials
- Faster recovery from ball marks
- Cool weather active growth with no purpling



A-4 25 lbs.
CREEPING BENTGRASS
One of a new generation of bentgrasses developed at Penn State

- Dense, upright growth that tolerates close mowing
- Fine texture
- Dollar spot resistant
- Rated high against poa annua invasion



T-1 25 lbs.
CREEPING BENTGRASS
Low organic matter production

- Rich, dark green color and fine texture
- Ranked at the top in the new NTEP trials
- Tenacious ground coverage even under tough growing conditions
- Aggressive against Poa annua, makes visible gains against it each year
- Extremely drought tolerant



V8 25 lbs.
CREEPING BENTGRASS
State-of-the-art creeping bentgrass

- #1 in overall quality in 2013 trials
- Medium dark green color
- Fine texture
- Great for low fungicide programs



Trueline 25 lbs.
CREEPING BENTGRASS
A certified variety at low cost

- The top fairway and tee variety in 2002 trials
- Dark green color
- Uniform growth habit



PC2.0 25 lbs.
CREEPING BENTGRASS
Dense, upright and aggressive growth habit

- Dense texture
- Good disease resistance
- Great spring green-up
- Good heat, cold and wear tolerance

L-93 XD 25 lbs.
CREEPING BENTGRASS
XD for Extra Disease Tolerance

- Top rated against Anthracnose
- Very fine texture
- Early spring green-up
- A top overall variety

PENNTRIO Blend 25 lbs.

CERTIFIED CREEPING BENTGRASS BLEND

A certified blend for fairway overseeding

- Combines strengths of three varieties
- Strong dollar spot resistance
- Early spring green-up
- Excellent for winter overseeding

PENNWAY Blend 25 lbs.

CREEPING BENTGRASS

For fairway overseeding

- An uncertified blend of bentgrasses which may consist of Pennlinks, Penncross, Penneagle, Seaside II or common varieties
- Least cost alternative

PENNCROSS BENTGRASS 25 lbs.

CREEPING BENTGRASS

The world-wide standard

- Heat tolerant and fast growing
- Disease resistant
- Very wear tolerant

National Turfgrass Evaluation Program

Ratings of Creeping Bentgrass Cultivars Grown on a Green

Mean Turfgrass Quality Ratings of Bentgrass Cultivars Grown on a Green in the U.S for Location Performance Index (LPI) Group 1 2019 Data

TURFGRASS QUALITY RATINGS: 1-9; 9 = IDEAL TURF

NAME	MEAN
Piranha	6.3
L-93 XD	6.2
Tour Pro	5.9
Luminary	5.9
Declaration	5.9
Macdonald	5.8
777	5.8
Barracuda	5.7
V-8	5.3
Pure Eclipse	5.3
Pure Select	5.0
Shark	5.0
Penn A-1	4.9
Kingdom	4.9
Nightlife	4.8
Armor	4.2
Penncross	3.7
LSD Value	1.0

Genetic Color Ratings of Bentgrass Cultivars Grown on a Green 2015-19 Data

GENETIC COLOR RATINGS 1-9; 9 = DARK GREEN

NAME	MEAN
Nightlife	8.1
Armor	7.9
Kingdom	7.9
777	6.7
Luminary	6.7
Piranha	6.7
Macdonald	6.6
V-8	6.5
Pure Eclipse	6.5
Penn A-1	6.5
Pure Select	6.4
Tour Pro	6.4
Shark	6.1
L-93 XD	6.3
Barracuda	6.2
Declaration	6.2
Penncross	5.4
LSD Value	0.4

Spring Greenup Ratings of Bentgrass Cultivars Grown on a Green 2015-19 Data

SPRING GREENUP RATINGS 1-9; 9 = COMPLETELY GREEN

NAME	MEAN
V-8	6.0
Piranha	6.0
Luminary	5.9
L-93 XD	5.9
777	5.9
Macdonald	5.9
Declaration	5.8
Tour Pro	5.8
Barracuda	5.7
Shark	5.7
Pure Eclipse	5.7
Pure Select	5.2
Penn A-1	5.1
Kingdom	5.0
Nightlife	4.8
Armor	4.8
Penncross	3.9
LSD Value	0.7

Leaf Texture Ratings of Bentgrass Cultivars Grown on a Green 2015-19 Data

LEAF TEXTURE RATINGS 1-9; 9 = VERY FINE

NAME	MEAN
Pure Eclipse	8.1
Pure Select	7.8
777	7.7
L-93 XD	7.7
Macdonald	7.7
V-8	7.6
Piranha	7.6
Shark	7.5
Tour Pro	7.4
Barracuda	7.3
Nightlife	7.2
Armor	7.0
Kingdom	7.0
Declaration	6.8
Luminary	6.8
Penn A-1	6.4
Penncross	4.4
LSD Value	0.6

Dollar Spot Ratings of Bentgrass Cultivars Grown on a Green; 2015-19 Data

DOLLAR SPOT RATINGS 1-9; 9 = NO DISEASE

NAME	MEAN
L-93 XD	8.1
Tour Pro	8.0
Declaration	8.0
Luminary	7.7
Barracuda	7.7
Piranha	7.6
V-8	7.5
Macdonald	7.5
Penn A-1	7.5
777	7.1
Penncross	7.0
Shark	6.6
Pure Eclipse	6.5
Kingdom	6.5
Pure Select	6.5
Nightlife	6.2
Armor	4.6
LSD Value	0.8

Anthracnose Ratings of Bentgrass Cultivars Grown on a Green; 2015-17 Data

ANTHRACNOSE RATINGS 1-9; 9 = NO DISEASE

NAME	NC1
Macdonald	7.6
L-93 XD	7.3
Luminary	7.3
Piranha	7.2
777	7.1
V-8	6.6
Pure Eclipse	6.6
Armor	6.4
Nightlife	6.4
Kingdom	6.2
Shark	6.2
Barracuda	6.0
Tour Pro	6.0
Declaration	5.9
Pure Select	5.6
Penn A-1	5.1
Penncross	3.4
LSD Value	1.9

Mean Turfgrass Quality Ratings Of Bentgrass Cultivars Grown On A Green At Three Locations In The U.S. For Lpi Group 1/ 2021 Data

TURFGRASS QUALITY RATINGS: 1-9; 9 = IDEAL TURF

NAME	MEAN
Piranha	5.8
007XL	5.5
Barracuda	5.5
L-93 XD	5.5
Piper	5.4
Penn A-1	5.3
Oakley	5.3
S1	5.3
Declaration	5.2
Spectrum	5.2
Penncross	5.1
LSD Value	1.0

Mean Turfgrass Quality And Other Ratings Of Bentgrass Cultivars Grown On A Green Under Reduced Fungicide Use At West Lafayette, In 2021 Data

TURFGRASS QUALITY RATINGS: 1-9; 9 = IDEAL TURF

NAME	SPRING GREENUP	SUMMER DENSITY	MICRODOCHMIUM PATCH	BROWN PATCH WEAR TOL	MEAN
Spectrum	7.7	8.0	8.3	9.0	7.3
Piper	7.7	8.3	9.0	9.0	7.1
007XL	7.3	7.3	9.0	8.3	7.0
Oakley	8.0	7.0	8.7	7.7	6.9
Piranha	7.0	7.0	9.0	9.0	6.3
L-93 XD	8.0	6.0	9.0	9.0	6.1
Barracuda	7.7	6.0	8.3	7.7	6.0
S1	7.3	6.7	8.0	8.0	6.0
Penn A-1	7.3	5.3	9.0	9.0	5.7
Declaration	8.0	5.0	7.7	9.0	5.6
Penncross	6.3	3.0	8.7	9.0	4.2
LSD Value	1.9	0.9	2.5	3.2	0.6

Bentgrasses

Agrostis palustris

National Turfgrass Evaluation Program

Ratings of Bentgrass Cultivars Grown on a Fairway or Tee

Mean Turfgrass Quality Ratings Of Creeping Bentgrass Cultivars Grown On A Fairway Or Tee In Location Performance Index (LPI) Group 2, 2018 Data

TURFGRASS QUALITY RATINGS 1-9;
9 = IDEAL TURF

NAME	MEAN
V-8	6.5
Barracuda	6.5
Crystal Blue Links	6.5
007	6.4
L-93XD	6.4
Nightlife	6.3
Piranha	6.3
Shark	6.3
Chinook	6.3
PC2.0	6.2
Kingdom	6.1
Armor	5.9
Pennncross	5.1
LSD Value	0.9

Leaf Texture Ratings Of Creeping Bentgrass Cultivars Grown On A Fairway Or Tee 2015-19 Data

LEAF TEXTURE RATINGS 1-9;
9 = VERY FINE

NAME	MEAN
Piranha	7.7
L-93XD	7.4
007	6.9
Chinook	6.9
V-8	6.5
Barracuda	6.4
Shark	6.1
Armor	5.5
Crystal Blue Links	5.5
Nightlife	5.3
PC2.0	5.1
Kingdom	4.9
Pennncross	3.3
LSD Value	1.4

Seedling Vigor Ratings Of Creeping Bentgrass Cultivars Grown On A Fairway Or Tee 2014 Data

SEEDLING VIGOR RATINGS 1-9;
9 = MAXIMUM VIGOR

NAME	MEAN
Barracuda	8.2
Crystal Blue Links	8.2
Shark	7.7
V-8	7.3
Piranha	7.3
Pennncross	7.1
007	7.0
Nightlife	7.0
Chinook	6.9
Kingdom	6.8
PC2.0	6.8
L-93XD	6.3
Armor	6.0
LSD Value	0.6

Dollar Spot Ratings of Creeping Bentgrass Cultivars Grown on a Fairway or Tee 2015-19 Data

DOLLAR SPOT RATINGS 1-9;
9 = NO DISEASE

NAME	MEAN
Chinook	7.9
L-93XD	7.7
Piranha	7.6
007	7.5
Barracuda	7.2
V-8	6.9
Crystal Blue Links	6.5
Shark	6.1
Kingdom	5.8
Nightlife	5.7
Pennncross	5.3
PC2.0	5.2
Armor	4.2
LSD Value	1.2

Anthraxose Ratings of Creeping Bentgrass Cultivars Grown on a Fairway Or Tee 2017 Data

TURFGRASS QUALITY AND OTHER RATINGS 1-9; 9 = BEST

NAME	MEAN
PC2.0	9.0
L-93XD	8.7
V-8	8.7
Shark	8.0
Armor	7.3
Chinook	7.3
Piranha	7.0
Barracuda	6.7
Nightlife	6.7
007	6.3
Kingdom	6.0
Crystal Blue Links	4.3
Pennncross	3.3
LSD Value	2.5

Percent Living Ground Cover (Summer) Ratings Of Creeping Bentgrass Cultivars Grown On A Fairway Or Tee 2015-19 Data

PERCENT LIVING GROUND COVER IN SUMMER:

NAME	MEAN
V-8	96.3
Chinook	95.0
Piranha	95.0
Crystal Blue Links	94.7
Shark	94.7
Nightlife	93.3
007	93.0
L-93XD	91.7
Armor	91.7
Barracuda	88.3
Pennncross	88.3
Kingdom	88.0
PC2.0	86.3
LSD Value	10.6

Pythium Root Rot Ratings Of Bentgrass Cultivars Grown On A Fairway Or Tee 2015 Data

PYTHIUM ROOT ROT RATINGS 1-9; 9=NO DISEASE

NAME	MEAN
V-8	8.7
L-93XD	8.7
Armor	8.7
Nightlife	8.7
Kingdom	8.3
007	8.0
Shark	8.0
Barracuda	7.3
Pennncross	7.0
Chinook	6.3
Crystal Blue Links	6.0
Piranha	6.0
PC2.0	6.0
LSD Value	1.5

Genetic Color Ratings of Creeping Bentgrass Cultivars Grown on a Fairway or Tee, 2015-19 Data

GENETIC COLOR RATINGS 1-9; 9 = DARK GREEN

NAME	MEAN
Nightlife	7.4
Kingdom	7.3
Armor	7.1
007	6.9
Piranha	6.9
Chinook	6.9
Barracuda	6.7
L-93XD	6.6
Shark	6.6
Crystal Blue Links	6.6
V-8	6.5
PC2.0	6.5
Pennncross	6.3
LSD Value	0.5



Preferred Seed's Best & Brightest..... 1 & 5 lbs.

NORTHEAST WILDFLOWER MIX

- Most attractive wildflower mix we have discovered
- Contains up to 30 colorful annual and perennial species
- Recommended spring planting, but late summer (before August 15) can be successful
- Plant with fine fescue for weed and erosion control at 3-6lbs./1000 sq. ft.

SEEDING RATE: 5-10 lbs./acre

(See page 19 for formula)

Poa Trivialis..... 50 lbs.

Approx. seeds per lb. = 2,000,000

- Recommended for wet, shady sites
- Used in Shady Supreme Mix
- The only true shade tolerant grass that forms a sod through spreading type growth habit

SEEDING RATE: 2-3 lbs./1000 sq. ft.

Buckwheat..... 50 lbs.

Fagopyrum esculentum

Approx. seeds per lb. = 15,000

- Rapid growing broadleaf summer annual
- Great for smothering weeds
- Good for building organic matter and increase of Ca and P availability

SEEDING RATE: 50-75 lbs./acre (June-July)

Micro Clover.....per lb.

- Smaller leaves
- Dense growth
- Low maintenance
- Fewer flowers than Dutch White

SEEDING RATE: 1 lb./1000 sq. ft.

Crown Vetch..... 50 lbs.

Coronilla varia

Approx. seeds per lb. = 98,000

- Also available in 1000 sq. ft. kits
- Low maintenance ground cover
- Deep roots
- Permanent knee high ground cover, reseeds itself
- Recommended seeding prior to August 15th
- Requires inoculation at time of planting
- Drought tolerance
- Very slow establishment
- Use Turf Type Annual Ryegrass at 1lb./1000 sq. ft. as nurse grass

SEEDING RATE: 40 lbs./acre

Red Top..... 50 lbs.

Agrostis alba

Approx. seeds per lb. = 4,500,000

- Very rapid germination
- Tolerates poor soil conditions and wet ground
- Grayish-green, coarse textured leaves

SEEDING RATE: 1-2 lbs./1000 sq. ft.

Winter Rye..... 56 lbs.

Secale cereale

Approx. seeds per lb. = 18,000

- A winter cover crop for green manure or late season erosion control
- Tolerates infertile, sand and acid soils
- Slow growing
- Fine texture

SEEDING RATE: 1-2 bushels (56 lbs./bu)/acre

Creeping Bentgrass..... 1 lbs.

Agrostis palustris

Approx. seeds per lb. = 6,000,000

- Used on golf course tees, fairways and greens
- Good for luxury lawns
- Attractive retail package

SEEDING RATE: 1-2 lbs./1000 sq. ft.

Dutch White

Clover..... 1 & 50 lbs.

Trifolium repens

Approx. seeds per lb. = 775,000

- Perennial legume (produces its own nitrogen)
- Attracts honey bees
- Spreads by stolens (above ground lateral shoots)
- White pinkish flowers
- Shallow roots
- Will persist down to 3/10 inch mowing height

SEEDING RATE: 1lb./1000 sq. ft.

Highland Colonial..... 25 lbs.

CREEPING BENTGRASS

Improved drought tolerance

- Upright growth habit
- Spreads by weak stolons and rhizomes
- Mixes well with Fine Fescue

Orchard & Vineyard Mix..... 25 lbs.

30% Chewings Fescue

20% Creeping Red Fescue

20% Hard Fescue

20% Improved Perennial Ryegrass

10% Palmetto Annual Ryegrass

- Formulated with slow growing perennial species of grasses to provide a low growing crop for Orchards, Vineyards, Christmas Tree Farms, and Nurseries
- Very economical to maintain compared to annual crops or bare soil aisles
- Reduces erosion, water and nutrient loss, improves soil organic matter

SEEDING RATE: 50-75 lbs./ acre

WETLAND

Seed mixtures designed for establishment in areas that are saturated with water, either permanently or seasonally, such that it takes on the characteristics of a distinct ecosystem.

PS Combination Obligate/Facultative Wetland Mixture:

A combination of grasses to supply cover and erosion control in varying environments.

% OF MIX	VARIETY
20-25%	Lurid Sedge
18-22%	Fox Sedge
18-22%	Virginia Wildrye
8-12%	Deertongue, Tioga
7-11%	Blunt Broom Sedge
5-9%	Frank's Sedge
2-4%	Star Sedge
1-3%	Awl Sedge
1-3%	Soft Rush
1-3%	Rice Cutgrass
.5-1.5%	Path Rush
.5-1.5%	Giant Bur Reed
.5-1%	Fringed Sedge
.5-1%	Woolgrass

Total = 100%

SEEDING RATE = 20 LBS. / ACRE

PS Northeast Wetland Mixture:

A versatile wetland mixture.

% OF MIX	VARIETY
63.0%	Creeping Bentgrass
17.0%	Rough Bluegrass
11.0%	Creeping Foxtail
4.5%	Annual Ryegrass
4.5%	Deertongue

Total = 100%

SEEDING RATE = 15 LBS. / ACRE

RIPARIAN ZONE

A Seed mixture designed for establishment on the bank or near a natural watercourse. Riparian zones slow and filter nutrients and sediments out of stormwater before they reach the waterway. Vegetation buffers also stabilize stream banks and floodplains, reducing erosion. Riparian foliage can also attract birds and wildlife, providing important habitat and migration corridors for many species.

PS Riparian Zone Mixture:

An assortment of grasses and shrubs to supply cover and habitat for wildlife.

% OF MIX	VARIETY	% OF MIX	VARIETY
18-22%	Virginia Wildrye	1-3%	New England Aster
18-22%	Deertongue	1-3%	Golden Alexanders
16-20%	Big Bluestem	1-2%	Wrinkleleaf Goldenrod
16-20%	Indiangrass	1-2%	Wild Bergamot
8-12%	Switchgrass	1-2%	Boneset
2-4%	Blackeyed Susan	.5-1%	Common Sneezeweed
2-4%	Blue Vervain	.1-.5%	Zigzag Aster
2-4%	Swamp Milkweed		

Total = 100%

APPLICATION RATE = 20 LBS. / ACRE

The Native and Naturalized seeding rates listed are based on optimum soil conditions, perfect site preparation, precise planting technique and proper maintenance schedules. Seedings established with conditions other than these are considered plantings made in adverse environmental conditions. In our view, almost all jobs that require Native and Naturalized seeds will not meet the strict criteria listed above and will be considered to have adverse environmental conditions. In all adverse environmental conditions seeding rates should be doubled and a seasonal nurse crop should accompany the planting.

Choose from one of our specialized mixes or allow us to help you design a custom mix based on your purposes and variable conditions. Individual species are also available.

Call or visit our office for our specific recommendations.

WE RECOMMEND USING NURSE CROPS WITH NATIVES AND WILDFLOWER MIXTURES

Spring/Summer Application Rate = 25-50 lbs./acre of Oats
 Fall/Winter Application Rate = 25-50 lbs./acre of Winter Rye

ESTABLISHMENT GUIDELINES

Apply herbicide to control unwanted vegetation. Persistent perennial weeds may take several applications. Check soil pH and make necessary adjustments. When the water table is receded, hand seed, broadcast or hydroseed. Seeding time is suggested as soon as possible following construction. Due to likely contamination, do not use fertilizer.

***All mixtures are subject to change based on availability*





UPLAND

Seed mixtures designed for establishment in areas that reside above the level where water flows or where flooding occurs, such that it takes on the characteristics of a distinct ecosystem.

PS Native Wildflowers & Grass Mixture:

A multipurpose grass and flower mixture with full display of colors.

% OF MIX	VARIETY	BLOOMING SEASON
33-35%	Sideoats Grama	SU/F
19-22%	Little Bluestem	LS/F
15-17%	Virginia Wildrye	SU/F
7-9%	Purple Coneflower	SU/F
2-4%	Partridge Pea	SU/F
2-4%	Lanceleaf Coreopsis	SP
2-4%	Blackeyed Susan	SU/F
1-3%	Oxeye Sunflower	SP/F
1-3%	Marsh Blazing Star	SU/F
1-3%	Butterfly Milkweed	SP/LS
1-3%	Ohio Spiderwort	SP/SU
.05-1%	Tall White Beardtongue	SP
.05-1%	Golden Alexanders	SP
.05-1%	Narrowleaf Mountainmint	SU
.05-1%	Wild Senna	SU
.05-1%	Blue False Indigo	SP/F
.05-1%	Wild Bergamot	SU/LS
.05-1%	Aromatic Aster	LS/F
.05-1%	Sundrops	SP/LS
.05-1%	Smooth Blue Aster	LS/F
.05-1%	New England Aster	LS/F
.05-1%	Heath Aster	LS/F
.05-1%	Gray Goldenrod	LS/F
.05-1%	Zigzag Aster	LS/F
.05-1%	Hairy Beardtongue	SP/SU
.05-1%	Maryland Senna	SU
.05-1%	White Goldenrod	LS/F
.05-1%	Early Goldenrod	SU
.05-1%	Licorice Scented Goldenrod	SU

Total = 100%

APPLICATION RATE = 20 LBS. / ACRE

Blooming Season Key

Summer = SU

Spring = SP

Late Summer = LS

Fall = F

WILDFLOWER POLLINATOR

Seed mixture designed for establishment of native pollinators and encouraging biodiversity, throughout the season, with specific blends of wildflowers to bloom throughout the year.

PS Best & Brightest Northeast Wildflower Mix:

A mix to bloom all season.

% OF MIX	VARIETY
11.33%	Wallflower, Siberian
8.67%	Larkspur, Rocket 'Imperial Mix'
8.67%	Flax, Scarlet
5.67%	Coreopsis, Lance Leaved
5.67%	Daisy, African
5.67%	Poppy, California, Orange
5.67%	Coneflower, Purple
5.67%	Baby's Breath, Annual
5.67%	Indian Blanket
5.67%	Lupine, Perennial
5.67%	Poppy, Corn, Mixed
4.67%	Cornflower, Dwarf Blue
4.67%	Cornflower 'Polka Dot Mix'
3.00%	Snapdragon, Tall Spurred 'Northern Lights'
3.00%	Evening Primrose, Dwarf
2.33%	Pinks, Sweet William
1.67%	Gayfeather
1.67%	Penstemon, Smooth
1.67%	Catchfly
0.73%	Aster, New England
0.73%	Columbine, Eastern
0.73%	Mexican Hat
0.43%	Black-Eyed Susan
0.35%	Coreopsis, Plains
0.35%	Foxglove

Total = 100%

APPLICATION RATE = 8 LBS. / ACRE (See page 38 for seeding instructions)

FORAGE POLLINATOR

Seed mixture designed for establishment of native pollinators and encouraging biodiversity, throughout the season, with specific blends of wildflowers to bloom throughout the year.

PS Forage Pollinator Mixture:

% OF MIX	VARIETY	BLOOMING SEASON
50.0%	Buckwheat	SU
17.0%	Crimson Clover	SP/LS/F
13.0%	Medium Red Clover	SP/LS/F
8.0%	Ladino Clover	SP/LS/F
8.0%	Yellow Blossom Sweet Clover	SU
4.0%	Alsike Clover	SP/LS/F

Total = 100%

APPLICATION RATE = 24 LBS. / ACRE

WE RECOMMEND USING NURSE CROPS WITH NATIVES AND WILDFLOWER MIXTURES

Spring/Summer Application Rate = 25-50 lbs./acre of Oats

Fall/Winter Application Rate = 25-50 lbs./acre of Winter Rye

ESTABLISHMENT GUIDELINES

Apply herbicide to control unwanted vegetation. Persistent perennial weeds may take several applications. Check soil pH and make necessary adjustments. When the water table is receded, hand seed, broadcast or hydroseed. Seeding time is suggested as soon as possible following construction. Due to likely contamination, do not use fertilizer.

****All mixtures are subject to change based on availability**



PREFERRED WILDLIFE SEED for PREFERRED RESULTS!

We have evaluated the research, test results and trials, and then chose the top performing seed, providing you with mixtures and individual varieties specifically adapted to the Northeast, capable of producing the absolute highest quality forages.

Killer plots start with killer seed. Preferred Wildlife Seed Mixes are formulated to thrive in diverse environments. So whether you are looking to provide premium nutrition to grow 'em big, cover to keep 'em close, or a kill plot to draw 'em in, Preferred Wildlife Seed has the mix or individual varieties for you.

Start your food plot right: well sown is half grown!

Planting Chart:

CROP	LIFECYCLE	SEEDING RATE (LBS PER ACRE)	NORTHEAST SEEDING DATES	PLANTING DEPTH (INCHES)	IDEAL PH
BIG BUCK CLOVER	Perennial	15 - 20	Spring or August	1/4 - 1/2	Above 6.0
FORAGE FEAST	Annual	6	Late Spring to Late Summer	1/4 - 1/2	6 - 6.5
BUCK CHEW	Annual	60 - 70	Early Spring or Late Summer	1/4 - 1/2	6 - 7
GAME BIRD BUFFET	Annual	20	May - July	1 1/2 - 2	6 - 6.5
WILDLIFE MEADOW	Perennial	20	Spring or Mid August - September	1/2 - 1	6 - 7.5
ALFALFA	Perennial	18 - 20 alone 8 - 12 in a mix	Spring or Early to Mid August	1/4 - 1/2	Above 6.5
BUCKWHEAT	Annual	48 - 60	June - July	1 1/2 - 2	Above 5.5
CHICORY	Perennial	12 - 15 alone 4 - 8 in a mix	April - June or August	1/4 - 1/2	Above 5.5
CHUFA	Perennial	40 - 50	April - June	1 1/2	Above 5.5
CLOVER	Perennial	10 alone 6 - 8 in a mix	Spring or August	1/4 - 1/2	Above 6.0
DWARF CORN	Annual	10 - 15	April - June	1/2 - 1	5.5 - 7
DWARF SUNFLOWER	Annual	15	April - June	1 1/2	5.7 - 8
GRAIN SORGHUM	Annual	15	May - June	1 1/2 - 2	6 - 6.5
KALE	Annual	4 - 8 alone 2 in a mix	Early Spring - Mid July	1/4 - 1/2	5.5 - 6.5
PREFERRED OATS	Annual	64 - 96	Spring or Fall	1 - 1 1/2	5.5 - 7.5
PEAS	Annual	50 - 60	Spring or Fall	1 1/2 - 2	Above 7.0
RAPE	Annual	4 - 8 alone 2 in a mix	May - June	1/4 - 1/2	Above 5.5
SMALL BURNET	Perennial	15 alone 1 - 4 in a mix	April - May	1/4 - 3/4	6.5 - 7.5
SOYBEANS	Annual	120	May - July	1 - 1 1/2	Above 6.0
SUGAR BEETS	Annual	10	April - June	1/2 - 1 1/2	Above 6.5
TURNIP	Annual	1 - 4 alone 1 in a mix	Early Spring or Mid-August - Late Summer	1/4 - 1/2	6 - 6.5

Planting Recommendations:

- Soil pH is vital to improve plant performance. Most native northeast soils have a low pH requiring at least several tons of lime per acre to get to the ideal pH of 6.5 to 7.0.
- Plants need nutrients from fertilizer to grow and provide nutrition to wildlife. Spread and work in 200-300 lbs. of a starter fertilizer before planting.
- At seeding time, work up the soil with several passes to produce a well tilled level seedbed.
- Just before seeding, pick any stones and cultipack or roll the seed bed to make the soil surface firm and level.
- Seed with a drill or broadcast spreader. If drilling, do not plant seed too deep. Most small seed should be planted only 1/4" deep or less. If broadcasting, spread a half rate in two directions for best coverage.
- After seeding, roll or cultipack the plot again to firm the seed into the soil and achieve better emergence.

Tips for Successful Food Plots:

- Select a site with ample sun and good drainage.
- Start site preparation 6 months in advance, test soil and apply lime.
- Spray the site with herbicide to reduce competition from unwanted vegetation.
- Follow planting recommendations.
- Mow perennial food plots frequently to promote fresh palatable growth and reduce weeds.
- Multiple small food plots positioned strategically are more attractive to wildlife than one large plot and are useful in providing a viable food source year round.



FLE **Big Buck**.....5, 20 & 50 lbs. **CLOVER MIX**

A blend of high yielding protein rich perennial clovers, and a touch of palatable chicory, suited for well drained soils with balanced soil pH. Plant at 20 lbs./acre in a firm seed bed, that is rolled before and after seeding. Incorporate 300 lbs./acre of 10-20-20 prior to planting, and fertilize annually with 250 lbs/acre of 10-20-20 for the life of the stand.

- 45% Jumbo Ladino Clover
 - 25% Gallant Red Clover
 - 20% Domino White Clover
 - 10% Oasis Chicory
- SEEDING RATE: 20 lbs./acre

FLE **Game Bird Buffet**.....20 & 50 lbs.

An annual mix of grain producing species. Seed this mix from late may until July 4th in most areas of the northeast. It will grow to 3-5 feet tall with adequate soil fertility provide good quality feed and cover for all game birds, turkeys, and deer through the late summer and fall. Incorporated 350 lbs/acre of 20-10-10 fertilizer before planting and seed at 20 lbs/acre in a well tilled level seed bed. Roll after seeding. Ideal planting depth should be 1/2" to 1" deep.

- 25% Wildlife Grain Sorghum (Milo)
 - 25% Dwarf Sunflower
 - 20% Japanese Millet
 - 15% Dwarf Corn
 - 15% Buckwheat
- SEEDING RATE: 20 lbs./acre

FOR MORE INFORMATION ON BIG BUCK CLOVER MIX, WILDLIFE MEADOW MIX & FORAGE FEAST AS WELL AS KENTUCKY HORSE PASTURE MIX AND OTHER PASTURE MIXES, SEE OUR FORAGE SEED CATALOG

FLE **Wildlife**..... 5 & 20 lbs. **MEADOW MIX**

A resilient perennial mix with the ability to handle partial shade. Meadow mix is designed for small meadows, and logging roads that need durable cover with little maintenance. It will provide food and habitat for diverse game birds and whitetails. Seed at 20 lbs/acre into a firm clean seed bed. Fertilize at planting with 250 lbs of triple 15 fertilizer per acre. Maintain the soil pH with lime at 6.0-7.0

- 30% Jumbo Ladino Clover
 - 30% Medium Red Clover
 - 15% Alsike Clover
 - 10% Festulolium
 - 10% Creeping Red Fescue
 - 5% Echelon Orchardgrass
- SEEDING RATE: 20 lbs./acre

FLE **Buck Chew Mix**.....20 & 50 lbs.

A quick growing annual mix that is perfect for the first time plot in an area. Can be seeded in early spring, April through May, or late summer. If seeded in August, and not overgrazed, the high sugar Italian ryegrass and crimson clover will overwinter. Seed at 60 lbs./acre with 300 lbs./acre of Triple 19 fertilizer at planting into a well tilled seedbed. Seeding it too deep will stop the clover from coming up. Roll after seeding.

- 32% Forage Oats
 - 30% Triticale
 - 20% Barley
 - 15% Italian Ryegrass
 - 3% Crimson Clover
- SEEDING RATE: 60 lbs./acre

FLE **Summer, Fall & Winter**.....6, 20 & 50 lbs. **WILDLIFE FORAGE FEAST**

A premiere annual brassica mix that will provide palatable tops for grazing and tubbers deer will feed on in the late fall and early winter after a good freeze. Plant in full sun on well drained soils, from mid-June until September 1st in most of the northeast. Seed at 6 lbs./acre into a firm seed bed. Brassicas are a very small seed and do not handle deep planting so it is important to roll the seed bed before and after planting. Fertilize at 300 lbs./acre with Triple 19 fertilizer.

- 40% Dwarf Essex Rape
 - 28% Improved Forage Rape
 - 10% Improved Forage Kale
 - 8% Appin Turnip
 - 8% Pasja Hybrid Forage Brassica
 - 6% Swede (Rutabaga)
- SEEDING RATE: 6 lbs./acre

FLE **Trophy Buck Mix**.....20 & 50 lbs.

Score big everytime with this late season mix. This product is blended to plant anytime from August 1st -September 15th in most of the northeast. Fertilize with 300 lbs./acre of Triple 19. Your results will be quick growing succulent plants that deer love, with some overwintering plants that will be available for late winter or very early spring grazing. This is an excellent choice for those kill plots that you will want to hunt over. This mix should be planted in full sun.

- 27% Winter Wheat
- 20% Winter Peas
- 20% Soybeans
- 16% Oats
- 6% Koga Annual Ryegrass
- 6% Crimson Clover
- 2% Dwarf Essex Rape
- 2% Hybrid Forage Brassica
- 1% Turnip

SEEDING RATE: 75 lbs./acre

FOR LESS THAN FULL BAG ORDERS, PLEASE CALL 24 HOURS IN ADVANCE!

New York State Department of Transportation Standard Specifications

SEED MIXTURES, TURF AND WILDFLOWER ESTABLISHMENT

New York State Department of Transportation Standard Specifications **FORMULAS**

- Below maximum allowed other crop, weed seed and inert matter
- No noxious weeds
- Labeled in accordance to all State and Federal Seed Laws
- Properly inoculated, packed, sampled, tested and labeled
- Certification provided for each package
- Mixtures percentages based on customer needs

GENERAL ROADSIDE MIX

- 30% Perennial Rye
- 25% Creeping Red Fescue
- 25% Chewings Fescue
- 15% Annual Rye
- 5% White Clover

SEEDING RATE: 6 lbs./1000 sq. ft. (265 lbs./acre)

SALT-TOLERANT MIX

- 40% Blend of Perennial Ryegrass
- 30% Tall Fescue
- 15% Alkaligrass
- 5% Creeping Red Fescue
- 5% Hard Fescue
- 5% Redtop

SEEDING RATE: 6.75 lbs./1000 sq. ft. (295 lbs./acre)

LAWN MIX

- 40% Perennial Rye
- 15% Annual Ryegrass
- 15% Creeping Red Fescue
- 15% Chewings Fescue
- 15% Kentucky Bluegrass

SEEDING RATE: 6 lbs./1000 sq. ft. (265 lbs./acre)

RESTORATION/HIGH TRAFFIC MIX

- 44% Tall Fescue
- 20% Perennial Rye
- 14% Annual Ryegrass
- 8% Chewings Fescue
- 8% Creeping Red Fescue
- 6% Kentucky Bluegrass

SEEDING RATE: 7.5 lbs./1000 sq. ft. (325 lbs./acre)

OTHER ITEMS AVAILABLE ON THE NYS DEPARTMENT OF TRANSPORTATION MATERIALS APPROVED LIST:

Fertilizer	Rolled Erosion	Limestone	Soil Stabilizers	Composted Sewage
Mulch Anchorage	Control	Wood Fiber Mulch	Sulfur	Sludge

ANALYSIS COVERAGE WEIGHT BAGS/PALLET

ANALYSIS COVERAGE WEIGHT BAGS/PALLET



FAS-START 18-24-12 SEED STARTER FERTILIZER

- Fas-Start is a rich mixture of plant foods specifically blended for rapid establishment of sod or new seedlings in turf grass areas.
- Fas-Start's NPK Fortified Formula contains all the essential nutrients needed to produce the best results regardless of soil quality.

18-24-12 5M 18# 96



INSECT CONTROL PLUS FERTILIZER 21-0-5

- Feeds and protects in one application
- Control ants, fleas, ticks, sod webworms and many other insects while feeding your lawn
- UFLEXX Stabilized Nitrogen feeds for up to 8 weeks, won't burn grass.

21-0-5 5M 16.65# 96
w/ 0.1% Bifenthrin 10M 33.3# 48



DISSOLVE WEED KILLER PLUS 22-0-8 FERTILIZER

- Controls dandelions, plantain, chickweed, buckhorn and most other lawn weeds.

22-0-8 5M 18# 96
w/3 way DISSOLVE 10M 36# 48



DUO CIDE ABOVE & BEYOND

- Eliminates more than 50 common insect pests including grubs, ticks, fire ants, mole crickets, fleas and more
- Granules disperse quickly and completely when watered, moving pesticides directly into the soil

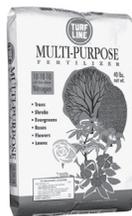
0.058% Bifenthrin 5M 18# 77
2.3% Carbaryl



MAXIMUM GREEN 22-0-8 TURF FERTILIZER

- Apply anytime, great Summer feeding.
- UFLEXX Stabilized Nitrogen feeds for up to 8 weeks, won't burn grass.
- Contains 4% iron for a DEEP GREEN lawn.

22-0-8 5M 18# 96
w/4% IRON 10M 36# 48



MULTI-PURPOSE 10-10-10 FERTILIZER

10-10-10 Multi Purpose Fertilizer is an all-purpose fertilizer with slow time-release nitrogen.

10-10-10 - 40# 48
Time Release



CRABGRASS PREVENTER PLUS 22-0-8 FERTILIZER

This spring formula is best suited before crabgrass becomes a problem. It will prevent crabgrass, foxtail, goosegrass and barnyard grass.

- Pre-emergence control of crabgrass and many other annual weeds.

22-0-8 5M 20.5# 96
w/1.12% PROCLIPSE 10M 41# 48



ORGANIC GARDENER 5-10-5 GARDEN FERTILIZER

Organic Gardener is a high-organic and specially balanced fertilizer for all vegetables, flowers and ornamentals.

5-10-5 - 20# 96



WINTERIZER PLUS DISSOLVE WEED KILLER with 18-0-12 FERTILIZER

- Controls viney and broadleaf weeds.
- It encourages root development and thickens turf without excessive leaf growth. This enables the lawn to better withstand the rigors of winter for a beautiful weed-free spring lawn.

18-0-12 5M 18# 96
10M 36# 48



MILORGANITE 6-4-0 ORGANIC FERTILIZER Plus Iron

Milorganite's slow-release formula provides nitrogen and other nutrients for up to 8-10 weeks after application.

6-4-0 2.5M 32# 63
w/2.5% Iron

Spreaders



Earthway Part #: 2750 - 25 LB NYLON BAG SEEDER/SPREADER

- Maximum capacity of 25 lbs.
- Spread between 8' and 12' by changing the crank rate.
- Designed to meter out your finest seeds with an integrated agitator & gate design.
- A full 600 denier nylon bag keeps moisture out and will resist tearing.



Earthway 2150 50lb Commercial Broadcast Spreader

- 50lb Hopper capacity
- 3-hole-drop system, with side-spread control
- Adjustable drop rate directly on the spreader
- Fully enclosed gearbox
- 13" pneumatic stud tires



Master Gardner S-70 N

- 70lb/31kg Hopper capacity
- Spread Width: 10'-12'
- Steel Enclosed Gearing
- Stainless Steel frame and hardware
- Setting control on handle for precise adjustments
- 3" x 10" pneumatic tires



LESCO Broadcast Spreader 50 lb. Capacity

- Adjustable handle for ease of use by operators of all sizes can be mounted in three positions
- 50# spreaders feature a powder coated Carbon steel frame
- Unique cam operated oscillating agitator improves product flow and will not damage product coating
- Over-sized tires with no rust rims increase stability and provide easier applications on taller, thicker, rougher lawns



Prizelawn BG1 Belly Grinder Spreader

- 20 lbs. capacity
- UV resistant polyethylene hopper
- Screw on cap
- Adjustable strap with carry position
- Heavy duty enclosed gears
- Side deflector and trim control standard
- Up to 14 ft. swath



Gandy

RENT FOR \$25/DAY
(NO DELIVERY ON RENTALS)

- Applies Seed Aide® CoverGrow™ and PennMulch at 70 lbs./1000 sq. ft. in a single pass

PRODUCT	SIZE	SQ. FT. COVERAGE	RATE/1000 SQ. FT.	LBS. N/1000 SQ. FT.	LBS. P ₂ O ₅ /1000 SQ. FT.	LBS. K ₂ O/1000 SQ. FT.	NITROGEN BREAKDOWN	NITROGEN SOURCE (N)	PHOSPHORUS SOURCE (P)	POTASSIUM SOURCE (K)
30-0-8 w/Excelis Maxx	50 lbs.	15,000	3.3 lbs.	1	0	0.26	*Excelis Maxx	amm. phos. urea amm. su.		muriate of potash
10-6-4 w/Excelis Maxx	50 lbs.	5,000	10 lbs.	1	0.6	0.4	*Excelis Maxx	amm. phos. urea amm. su.	ammoniated phosphate	muriate of potash
18-24-12 w/Excelis Maxx	50 lbs.	9,000	5.55 lbs.	1	1.33	.67	*Excelis Maxx	amm. phos. urea amm. sulfate	ammoniated phosphate	muriate of potash
19-19-19	50 lbs.	9,500	5.25 lbs.	1	1	1	Ammoniacal 7.43% WSN 11.57%	amm. phos. urea	ammoniated phosphate	muriate of potash
10-20-10	50 lbs.	5,000	10.0 lbs.	1	2	1	Ammoniacal 10.0%	amm. phos. amm. sulfate	ammoniated phosphate	muriate of potash
10-20-20	50 lbs.	5,000	10.0 lbs.	1	2	2	Ammoniacal 10.0%	amm. phos. amm. sulfate	ammoniated phosphate	muriate of potash
6-4-0 Milorganite w/2.5% Iron	50 lbs.	3,000	16.67 lbs.	1	.33	0				
90% Elemental Sulfur	50 lbs.		per soil test							
Pelletized Limestone	50 lbs.		per soil test							

*Excelis Maxx is a stabilizer which contains a patented root bio stimulant. It's designed to protect nitrogen from all three pathways of loss, stimulate root growth, and improve nutrient uptake



Mulch Master Shredded Straw

- Perfect for use over new seedings
- Provides up to 800 sq. ft of coverage
- 3.5 Cubic feet of highly compressed material per bag
- Patented production process shreds straw into easy to apply, dust-free and clump free material that spreads quickly and easily, enriches soil with organic compounds, promotes germination and prevents erosion



Seed Aide® CoverGrow™40 lbs.

Seed Aide® CoverGrow™ is an advanced technology granular mulch made from recycled wood and cellulose fibers. Whether you're spot treating smaller bare spots or hydroseeding larger areas, CoverGrow is the easy and convenient way to establish vegetations

HYDROSEEDING

- Rapid dispersion and fast mixing in jet-agitated hydroseeders
- Easy application of the smooth-shooting, high coverage slurry
- Resists rainfall impact to stay in place longer than competition due to advanced tackifier technology

BROADCAST WITH SPREADER OR BY HAND

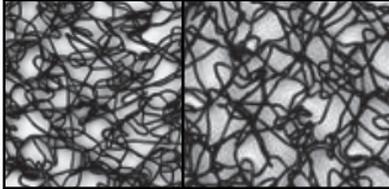
- Increased swelling, dispersion and coverage compared to leading dry applied pellets
- Smoother flowing for easy spreader application
- Stays in place due to advanced tackifier technology
- Flat to 5H:1V Slopes 50 lb/1000 sq ft (22.7 kg/93 sq m)



Rolled Erosion Control Products



#7003



#7010

#7020

Futerra TRM

Futerra TRM is a three-dimensional nylon Turf Reinforcement Mat (TRM) made of polyamide (nylon) filaments thermally fused at their intersections to create a homogeneous matrix. Ninety-five percent of the matrix is open space, which supplements nature's own erosion control system by reinforcing plant root systems. As the roots grow, they become entwined within the lofty and open Futerra TRM matrix, creating an extremely stable cover. When fully vegetated, Futerra TRM can double the effectiveness of natural vegetation and replace hard armor systems at a fraction of the cost. Futerra's tough root-reinforcing system anchors vegetation and protects against hydraulic lift and shear forces created by high-volume discharges. It can withstand velocities greater than 20 feet per second and shear stresses of 10 pounds per square foot. We also offer the Profile GreenArmor System. Used in conjunction with Flexterra, the hydraulically applied FGM, the GreenArmor System offers a more aesthetically pleasing, environmentally superior and cost-effective means of protecting high-discharge waterways and steep slopes.

#7003	Width: 8'	Length: 225'	Area: 1,800 sq. ft.	Color: Black	Staples: vary per application
#7010	Width: 8'	Length: 169'	Area: 1,350 sq. ft.	Color: Black	Staples: vary per application
#7020	Width: 8'	Length: 112.5'	Area: 900 sq. ft.	Color: Black	Staples: vary per application

Slope to IH:IV : Staple Recommendation $\leq 3H : IV - 2$ to $3/4yd^2 \leq IH : IV - 3$ to $4/4yd^2$

DOT Classifications: Class I, Type A; Class I, Type B; Class I, Type C; Class II, Type B



Premier Straw / Coconut Erosion Control Blanket

AEC Premier Straw/Coconut blend ECBs, shall be made from the finest quality weed seed free agricultural straw and top quality strands of coconut fiber. The coconut fibers shall be blended into the straw ECB to comprise 30% of the total weight of the ECB with the remaining 70% to be straw. The coconut and straw fibers shall be evenly distributed in ECB form and stitched to a UV enhanced black net on top and a UV enhanced green net on bottom.

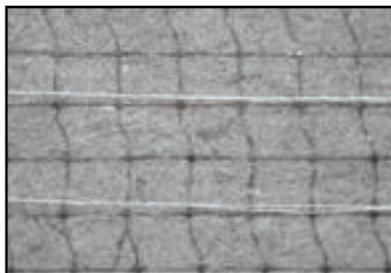
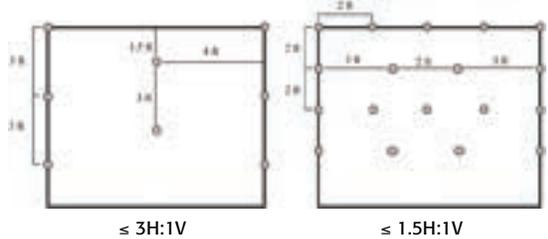
Typical Applications: Highway Slopes and embankments;
Utility right-of-ways
Slopes: 1.5H:1V and flatter
Netting Type: Top: UV Stabilized Black or FibreNet
Bottom: Stabilized Green, or FibreNet

Shear Stress Rating: 96.0 Pa (2.00 lb/ft²)
Roll Sizes: 8.0 ft x 112.5 ft (100 yd²)
Weight*: 0.50 lb./ yd²
Netting: Polypropylene

Staple Recommendation Minimums: $< 3:1 - 110$ staples/ECB $< 1.5:1 - 260$ staples/ECB
Channel: < 2.00 lb/ft² (96Pa) Shear Stress < 8.5 ft/sec (2.6 m/sec) Velocity
Functional Longevity: < 24 months

DOT Classifications: Class I, Type A; Class I, Type B; Class I, Type C; Class II, Type B; Class II, Type D

Staple Placement



Premier Coconut Erosion Control Blanket

AEC Premier Coconut ECB, as manufactured by American Excelsior Company, shall be made from the finest quality strands of coconut fiber. AEC Premier Coconut ECB shall be comprised of coconut fiber. The coconut fiber shall be evenly distributed in ECB form and stitched to a UV enhanced heavy black net on top and bottom.

Typical Applications: Highway Slopes and embankments; Utility right-of-ways
Slopes: 1.5H:1V and flatter
Netting Type: UV Stabilized Black or FibreNet

Shear Stress Rating: 108.0 Pa (2.25 lb/ft²)
Roll Sizes: 8.0 ft x 112.5 ft (100 yd²)
Weight*: 0.50 lb./ yd²
Netting: Polypropylene

Staple Recommendation Minimums: $< 3:1 - 110$ staples/ECB $< 1.5:1 - 220$ staples/ECB
Channel: < 2.25 lb/ft² (108 Pa) Shear Stress < 9.0 ft/sec (2.7 m/sec) Velocity
Functional Longevity: < 36 months

DOT Classifications: Class I, Type A; Class I, Type B; Class I, Type C; Class II, Type B; Class II, Type D



Use slope staple pattern guide for Curlex® II CL ECB DOUBLE NET on page 27

Premier Double Net Straw ECB

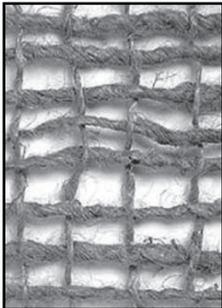
Premier Straw ECBs are biodegradable ECBs consisting of the finest straw fibers available. Depending on job site requirements, a variety of Quick Mow, environmentally sensitive, and stronger netting types are available. At a standard width of 8 feet, which is 18 inches wider than conventional straw ECBs, our Premier Straw ECBs are specifically designed to provide you with the most effective installation widths available. Lightweight and easy to handle, you can rely on AEC Premier Straw to hold its own in the everyday basic ECB applications. Premier straw blankets are available individually wrapped or in master packs to allow for mechanical unloading and stacking.

Typical Applications: Highway Slopes and embankments; Utility right-of-ways
 Slopes: 2:1 and flatter
 Netting Type: Double: Green, QuickMow, or FibreNet
 Shear Stress Rating: 84.0 Pa (1.75 lb/ft2)
 Roll Sizes: 8.0 ft x 112.5 ft (100 yd2)
 Weight*: 0.50 lb./ yd2
 Netting: Polypropylene
 Staple Recommendation Minimums: < 4:1 - 90 staples/ECB < 3:1 - 190 staples/ECB < 2:1 - 250 staples/ECB
 Channel: <1.75 lb/ft2 (84Pa) Shear Stress <7.0 ft/sec (2.1 m/sec) Velocity
 Functional Longevity: < 12 months
DOT Classifications: Class I, Type A; Class I, Type B; Class I, Type C; Class II, Type B

Jute Mesh Erosion Control

Rolled Erosion Control Product, (Jute Mesh) involves placing a lightweight, degradable, open weave textile (OWT) over bare soil areas. Composed of a lightweight, natural jute fiber, this treatment provides immediate protection from raindrop impact and runoff, and also facilitates the establishment of long term vegetation. Jute is the only 100% biodegradable, renewable and sustainable erosion control fabric available. Use on cut and fill slopes between 3:1 and 2:1 (H:V). For specific maximum slope gradients, consult your geotechnical engineer.

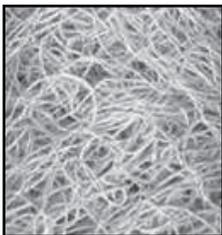
Max Slope (H:V) : 2:1
 Max Flow Velocity : N/A
 ECTC Category (1) : 2C
 Width: 48" Length: 225' Area: 900 sq. ft. Staples: 2000/acre or 55-75 per roll
 Functional Longevity : 12 months



Curlex® Sediment Logs

Curlex Sediment Logs use excelsior fibers to reduce hydraulic energy & filter sediment-laden runoff. Environmentally friendly, naturally seed free, Curlex Sediment Logs. Water filters through (not underneath) the diameter of the porous, interlocked fiber log matrix. As it does, velocity is naturally reduced and sediment is collected on the upstream side of the excelsior fiber log. Install Sediment Logs over bare soil and/or biodegradable & permanent erosion control blankets, on steep slopes as a wattle, around drains for inlet protection, or around job sites for perimeter control.

Typical Applications: Ditch bottoms, swales and over bare soils.



	TYPE I	TYPE II
Nominal Diameter	20 in	12 in
Minimum Diameter	18.0 in	11.0 in
Length (±10%)	10 ft	10 ft
Weight** (±10%)	30 lb	20 lb
Density** (±10%)	(1.38 lb/ft3)	(2.54 lb/ft3)
Functional Longevity:	< 24 months	

Hardwood Stake Application:
 12 inch log = 30" stake every 2 linear feet
 20 inch log = 48" stake every 2 linear feet

Hardwood Stakes

- 1 1/8" x 1 1/8" Size: 30"
- 1 1/8" x 1 1/8" Size: 48"

Curlex Sediment Logs Design Values With Comparisons to Typical Straw Wattles

Product Name Nominal Diameter	Density* (lb/ft 3)	CHANNEL DESIGN		SLOPE DESIGN	
		GPM/ft2**	GPM/linear ft of installed product	P Factor*** (event-based)	% Soil Retained
9" Straw Wattle	4.5	7.5	5.6	0.676	32.4
12" Straw Wattle	3.8	8.0	8.0	0.828	17.2
12" Curlex Sediment Log	2.5	40.0	36.7	.297	70.3
20" Curlex Sediment Log	1.4	37.5	46.9	.297	70.3

*Weight is based on a dry fiber weight basis at time of manufacture. Baseline moisture content of Great Lakes Aspen excelsior, AEC Premier Straw, and AEC Premier Coconut fibers are 22%, 15%, and 20%, respectively.

**Based on ASTM D5 14 1.

***Based on large-scale simulated rain fall testing.



Curlex® Blankets EXCELSIOR EROSION CONTROL BLANKETS

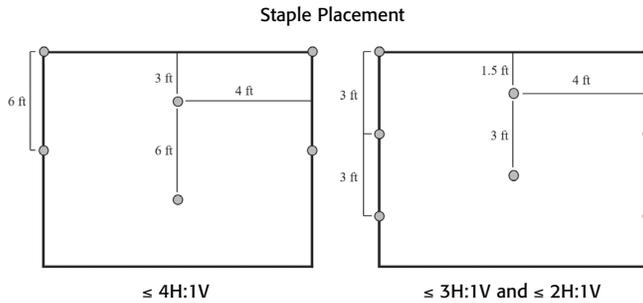
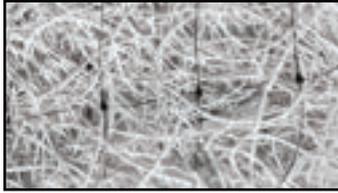


Curlex® I Quick Grass ECB SINGLE NET

A specific cut of Great Lakes Aspen curled wood excelsior with 80% six-inch fibers or greater fiber length. It shall be of consistent thickness, with fibers evenly distributed throughout the entire area of the blanket. The top of each blanket shall be covered with photodegradable or biodegradable netting. Material shall not contain any weed seed or chemical additives.

Recommended Use: Slopes $\leq 2H : 1V$;
 Channels to 1.75 lb/ft² (84Pa) Shear Stress, 7.0 ft/sec (2.1 m/sec) Velocity
 Staple Recommendation Minimums: $< 4:1 - 60$ staples/ECB $< 3:1 - 110$ staples/ECB $< 2:1 - 110$ staples/ECB
 Roll Size: 8' x 112.5' (100 yd²) Standard Weight: 0.73 lb./yd² Color: QuickGRASS Green
 Functional Longevity: < 18 months

DOT Classifications: Class I, Type A; Class I, Type B; Class I, Type C; Class II, Type B



Curlex® CL Blankets EXCELSIOR EROSION CONTROL BLANKETS



Curlex® II CL ECB DOUBLE NET

A specific cut of Great Lakes Aspen curled wood excelsior with 80% six-inch fibers or greater fiber length. It shall be of consistent thickness, with fibers evenly distributed throughout the entire area of the blanket. Material does not contain any seeds or chemical additives. The top and bottom of each Curlex II CL shall be covered in netting.

Recommended Use: Slopes $< 1.5H:1V$
 Channels to 7.3 ft/s, Shear Stress to 1.8 lb/ft² (Channels Shear: 1.60 lb/ft² to 1.80 lb/ft²)
 Staple Recommendation Minimums: $< 4:1 - 120$ staples/ECB $< 3:1 - 147$ staples/ECB $< 1.5:1 - 335$ staples/ECB
 Roll Size: 8' x 150' (133.3 yd²) Weight*: 0.50 lb./yd² Color: Natural Aspen
 Functional Longevity: < 18 months

Netting Options: Green, QuickMow, White (90 day)

Color: Natural Aspen

Fiber: Engineered Curled Excelsior for E&S Control

Fiber Action During Hydraulic Events: Expand, Dig into Soil, and Form Strong Continuous Interlocking Matrix

Roll Length: 150.0 ft (45.7 m)

Roll Area: 133.3 yd² (111.5 m²)

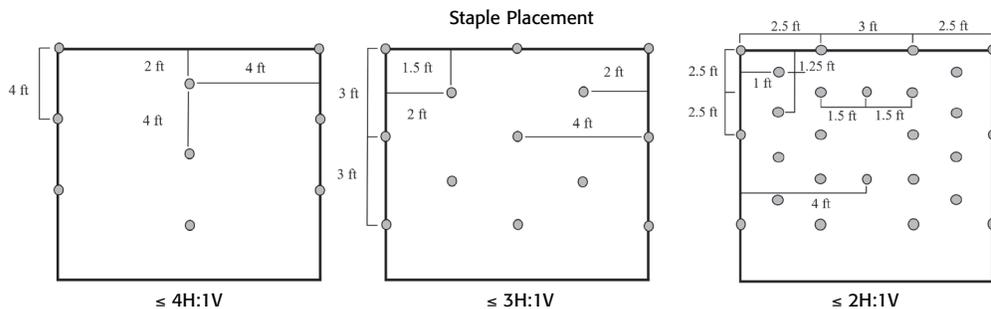
Side Seams: Not Required

Mass per Area $\pm 10\%$: 0.50 lb/yd² (0.27 kg/m²)

Weed Seeds: 100% Seed Free

DOT Classifications: Class I, Type A; Class I, Type B; Class I, Type C; Class II, Type B; Class II Type D

*Weight is based on a dry fiber weight basis at time of manufacture. Baseline moisture content of Great Lakes Aspen Excelsior is 22%.



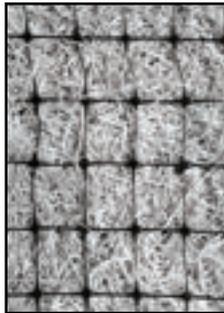


Curlex® NetFree™

Great Lakes Aspen Excelsior with no weed seeds. Curled, interlocking fibers with barbed edges.

Recommended Use: Slopes \leq 3H : 1V;
 Channels to 1.0 lb/ft² (48Pa) Shear Stress, 3.0 ft/sec (0.9 m/sec) Velocity
 Staple Recommendation Minimums: < 4:1 - 72 staples/ECB < 3:1 - 152 staples/ECB Channels - 384 staples/ECB
 Fiber Size: 80% of fibers a minimum of 6 in. (15.2 cm) long, 0.038 in. wide x 0.018 in. thick
 (0.97mm wide x 0.46mm thick)
 Mass per Unit Area: 0.73 lb/yd² (0.40 kg/m²)
 Thread Material: Biodegradable
 Width: 8.0 ft (2.4 m) Length: 90.0 ft (27.4 m) Area: 80.0 yd² (66.9 m²) Color: Natural
 Functional Longevity: < 18 months

DOT Classifications: Class I, Type A; Class I, Type B; Class I, Type C; Class II, Type B; Class II, Type C; Class II, Type D



Curlex® Enforcer® TRM

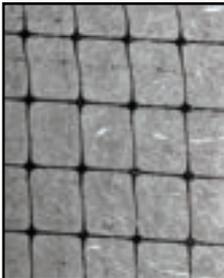
1.25 lb/yd² of 100% Aspen Excelsior Wood Fibers designed to provide a fiber service life of approximately 24-36 months, but the remaining components of the product are permanent. It is bound by two layers of extra heavy-duty black UV stabilized netting to provide permanent reinforcement between established vegetation and root systems in channel bottoms or on slopes.

Typical Applications: Channel bottoms, swales, steep slopes, let down structures, drop structures, and other areas associated with concentrated water flow exceeding the performance capability and service life of a standard biodegradable blanket.

Channels to 3.25 lb/ft² (156Pa) unvegetated, 10.0 lb/ft² (480Pa) vegetated, 17.0 lb/ft² (5.2 m/s) velocity
 Staple Recommendation Minimums: < 4:1 - 36 staples/ECB < 3:1 - 66 staples/ECB < 2:1 - 114 staples/ECB
 Roll Size: 8' x 67.5' (60 yd²)
 Weight: 1.25 lb./ yd²
 Netting (top and bottom): Extra heavy duty black
 Color: QuickGrass Green
 Slopes: < .5H:1V

Shear Stress Rating: 156 Pa (3.25 lb/ft²) unvegetated; 480 Pa (10.0 lb/ft²) vegetated

DOT Classifications: Class III, Type C; Class III, Type D



Recyclax® Permanent TRM

Recyclax - the first permanent erosion control mat made from 100% recycled post-consumer goods - "green or brown bottles". That is right, there are 20 bottles in every pound of Recyclax turf reinforcement mats (TRMs). American Excelsior Company invented the first biodegradable blanket, Curlex®, and we have done the same with recycled fibers to create Recyclax. Not only is Recyclax environmentally responsible, it is designed to meet your most difficult erosion control challenges. For long-term permanent erosion control, Recyclax is the answer.

Typical Applications: Recyclax TRM's are designed to allow revegetation and provide permanent protection in areas of concentrated flow: Ditch bottoms, channel bottoms, swales & slopes; steep reinforced slope veneers; landfill down chutes & let down structures; pond, small lake, and stream bank shoreline stabilization; urban Storm water drainage channels & waterways; concentrated flow areas as a TRM component with Curlex® Sediment Logs®; typical Rip Rap or Hard Armor applications

Slope Recommendation: < .5:1
 Staple Recommendation: < 3:1 - 1.1 staples/yd² < 0.5:1 - 1.6 staples/yd²
 Channels: 10.0+ lb/ft² (480+ Pa) Shear Stress
 Width: 8.0 ft (2.4 m) Length: 90 ft (27.4 m) Area: 80.0 yd² (66.9 m²) Weight: 50.0 lb.(22.7 kg) Color: Green

DOT Classifications: Class III, Type B; Class III, Type C; Class III, Type D

OTHER EROSION CONTROL PRODUCTS

- Straw Wattles
- Blanket Staples (Metal)
- Hardwood Stakes



Preferred Seed Co. has been named as the regional distributor of Profile Products, LLC Engineered and Specified Products (ESP). These products represent the industry's most advanced erosion and sediment control technologies. ESP's can assure you achieve the most economical way to keep soils in place and sediment on-site. And most importantly these products will help you quickly and permanently establish seed for a fraction of the cost of sod.

Hydraulically Applied Erosion Control Products



Flexterra® HP-FGM

50 lb. bale
IT'S LIKE A BLANKET IN A TANK!

Nothing controls soil erosion and accelerates seed germination like Flexterra, the ultimate hydraulically applied blanket. Flexterra is a flexible growth medium (FGM) made of Thermally Refined™ wood fibers, crimped interlocking fibers, and additives that are engineered to perform under extreme conditions.

Information on detail specifications, application guides, coverage charts and case studies are available, please contact us.

APPLICATION RATES	
Slope Gradient	lb/ac
< 4H to 1V	2,500
> 4H to 1V and < 3H to 1V	3,000
> 3H to 1V and < 2H to 1V	3,500
> 2H to 1V and < 1H to 1V	4,000
> 1H to 1V	4,500
Below ECB or TRM	1,500
As infill for TRM	3,500

Application rates must be followed for hydraulically applied erosion control products. Not following application rates will result in failure from insufficient interlocking mechanical fibers.

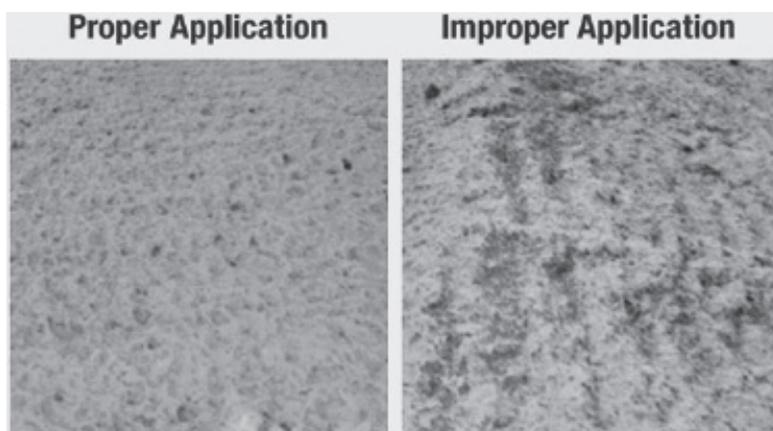
Flexterra® and ProMatrix™ can be applied in multiple layers. Add 50% or more of the required seed needed for the desired area when applying the first hydraulic layer. Mix until all fiber is fully broken apart and hydrated (minimum of 10 minutes—increase mixing time when applying in cold conditions). Use approved hydro-spraying machines with fan-type nozzle (50-degree tip) whenever possible to achieve best soil coverage. Add fertilizer, slow down agitator and start applying. Add the remaining required seed to the subsequent application layers until minimum hydraulic erosion control product rates have been achieved and the area has 100% coverage. Rougher graded soil will require higher rates of Flexterra than finer graded soil due to more surface area. Apply from opposing directions to assure 100% soil surface coverage. 100% coverage must be achieved to ensure proper fiber adhesion. Rates for mixing purposes are 25# of Flexterra per 100 gallons of water applied to 1000 sq.ft. per layer. Depending on slope, up to 4+ layers may be needed.



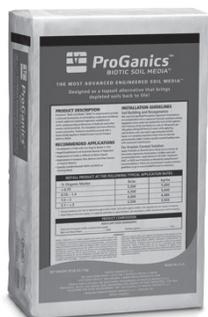
ProMatrix™ EFM 50 lb. bale

ProMatrix™ Engineered Fiber Matrix™ (EFM) is a fully biodegradable matrix composed of 100% recycled Thermally Refined™ wood fibers, crimped interlocking man-made biodegradable fibers, and naturally derived biopolymers. ProMatrix is phytosanitized, free from harmful plastic nettings, and when cured forms an intimate bond with the soil surface to create a continuous, porous, absorbent and flexible erosion resistant blanket that allows for rapid germination and accelerated plant growth. ProMatrix may require a 24-48 hour curing period to achieve maximum performance. It provides outstanding performance at a BFM level, yet provides excellent benefits for contractors with 20 percent less tank loads per job because of the high-loading at formulation 60 lbs. per 100 gallons of water.

APPLICATION RATES	
Slope Gradient	lb/ac
< 4H to 1V	2,500
> 4H to 1V and < 3H to 1V	3,000
> 3H to 1V and < 2H to 1V	3,500
> 2H to 1V and < 1H to 1V	4,000
> 1H to 1V	4,500



Engineered Soil Media™ (ESM™)



ProGanics™ BIOTIC SOIL MEDIA™

ProGanics™ Biotic Soil Media™ (BSM™) has been designed as a topsoil alternative that accelerates the development of depleted soils/substrates with low organic matter, low nutrient levels and limited biological activity. Patent-pending ProGanics™ Biotic Soil Media™ (BSM™) has been designed as a topsoil alternative that accelerates the development of depleted soils/substrates with low organic matter, low nutrient levels and limited biological activity.

APPLICATION RATES	
% Organic Matter	lb/ac
< 0.75	5,000
≥ 0.75 & < 1.5	4,500
≥ 1.5 & < 2.0	4,000
≥ 2.0 & < 5.0	3,500



ProGanics® DUAL™ BIOTIC SOIL + EROSION CONTROL

ProGanics DUAL is a hydraulically applied Biotic Erosion Control Matrix (BECM) that combines the soil-building properties of ProGanics® Biotic Soil Media™ (BSM™) with the erosion control performance of a Bonded Fiber Matrix (BFM). ProGanics DUAL accelerates development of depleted soils and vegetative establishment while simultaneously providing highly effective erosion protection in a consolidated, one-step application.

APPLICATION RATES		
% Organic Matter	Slope Gradient	lb/ac
< 5.0 and ≥ 1.5	≤ 4H:1V	4,000
< 1.5 and ≥ 0.75	> 4H:1V and ≤ 3H:1V	5,500
< 0.75	> 3H:1V and ≤ 2H:1V	6,500



Profile® Wood
50 lb. bale

Profile® Wood is a fully biodegradable, Hydraulic Mulch (HM) composed of 100% recycled Thermally Refined™ virgin wood fibers derived from whole wood chips. The HM is phytosanitized, free from plastic netting, and upon application forms an intimate bond with the soil surface to create a porous, absorbent and flexible erosion resistant blanket that allows for rapid germination and accelerated plant growth.

TYPICAL APPLICATION RATE:

2,000 lbs./acre

> 4H to 1V and ≤ 3H to 1V 2,500 lbs./acre



Profile® Wood
WITH TACKING AGENT 3®
50 lb. bale

Profile® Wood with Tack is a fully biodegradable, Hydraulic Mulch (HM) composed of 100% recycled Thermally Refined™ virgin wood fibers and wetting agents (including high-viscosity colloidal polysaccharides). The HM is phytosanitized, free from plastic netting, and upon application forms an intimate bond with the soil surface to create a porous, absorbent and flexible erosion resistant blanket that allows for rapid germination and accelerated plant growth.

TYPICAL APPLICATION RATE:

2,000 lbs./acre

> 4H to 1V and ≤ 3H to 1V 2,500 lbs./acre



Profile® Blend
70/30

50 lb. bale
70% Thermally Refined® Virgin Wood Fibers
30% Cellulose Fibers

Profile® Blend is a fully biodegradable, Hydraulic Mulch (HM) composed of 100% recycled Thermally Refined™ virgin wood fibers and cellulose fibers. The HM is phytosanitized, free from plastic netting, and upon application forms an intimate bond with the soil surface to create a porous, absorbent and flexible erosion resistant blanket that allows for rapid germination and accelerated plant growth.

TYPICAL APPLICATION RATE:

2,000 lbs./acre

> 4H to 1V and ≤ 3H to 1V 2,500 lbs./acre



Profile® Blend 70/30
WITH TACKING AGENT 3®

50 lb. bale
67% Thermally Refined® Virgin Wood Fibers
30% Cellulose Fibers
3% Tackifier including High-Viscosity Colloidal Polysaccharides

Profile® Blend with Tack is a fully biodegradable, Hydraulic Mulch (HM) composed of 100% recycled Thermally Refined™ virgin wood fibers, cellulose fibers and wetting agents (including high-viscosity colloidal polysaccharides). The HM is phytosanitized, free from plastic netting, and upon application forms an intimate bond with the soil surface to create a porous, absorbent and flexible erosion resistant blanket that allows for rapid germination and accelerated plant growth.

TYPICAL APPLICATION RATE:

2,000 lbs./acre

≤ 4H to 1V and ≤ 3H to 1V 2,500 lbs./acre



Profile® Specialty
Blend 50/50

WITH TACKING AGENT 3®
50 lb. bale

Profile® Blend is a fully biodegradable, Hydraulic Mulch (HM) composed of 100% recycled Thermally Refined™ virgin wood fibers and cellulose fibers. The HM is phytosanitized, free from plastic netting, and upon application forms an intimate bond with the soil surface to create a porous, absorbent and flexible erosion resistant blanket that allows for rapid germination and accelerated plant growth.

TYPICAL APPLICATION RATE:

2,000 lbs./acre

≤ 4H to 1V 2,000 lbs./acre

> 4H to 1V and ≤ 3H to 1V 2,500 lbs./acre



Profile®

CELLULOSE
50 lb. bale

Profile® Cellulose is a fully biodegradable, Hydraulic Mulch (HM) composed of 100% recycled cellulose fibers. The HM is phytosanitized, free from plastic netting, and upon application forms an intimate bond with the soil surface to create a porous, absorbent and flexible erosion resistant blanket that allows for rapid germination and accelerated plant growth.

TYPICAL APPLICATION RATE:

2,000 lbs./acre

Straw Binding: 750 lbs./acre



Seed Aide®
CoverGrow™
40 lb. bag

Seed Aide® CoverGrow™ is an advanced technology granular mulch made from recycled

wood and cellulose fibers. Whether you're spot treating smaller bare spots or hydroseeding larger areas CoverGrow™ is the easy and convenient way to establish vegetations.

HYDROSEEDING:

- Rapid dispersion and fast mixing in jet-agitated hydroseeders
- Easy application of the smooth-shooting, high coverage slurry
- Resists rainfall impact to stay in place longer than competition due to advanced tackifier technology

TYPICAL APPLICATION RATE:

Flat to 5H:1V slopes 1,500 lbs./acre

5H:1V to 4H:1V slopes

2,500 lbs./acre

3H:1V slopes 3,000 lbs./acre



Tacking Agent 3[®]

4/8 lb. bags per case

University tested and proven to reduce soil erosion and water runoff immediately after hydro-seeding, no cure time required! Tacking Agent 3[®] contains a combination of hydro-colloid polymers and increases water holding capacity of all types of hydraulic mulches, while enhancing seedling emergence and turf establishment. Tacking Agent 3[®] contains dark green marker dye for easy metering and meets or exceeds requirements for non-asphaltic tacking emulsion.

TYPICAL APPLICATION RATE:

Mulch Binding:

4/1-3/1 slope 30 lbs./acre,

>2/1 slope 60 lbs./acre

Straw Mulch Binding: 50 lbs./acre



Jump Start[™]

2/2.5 gal jugs per case

Jump Start[™] is a proprietary liquid formulation containing a soil penetration agent, humic acid and over 200 species of beneficial soil bacteria to:

- Improve moisture infiltration and retention for faster, more complete germination and uniform stands of vegetation
- Promote faster nutrient uptake and conversion to get plants off to a faster, stronger start
- Provide a hormonal plant response to maximize root development and plant

TYPICAL APPLICATION RATE:

1.5 gal./acre



AquaGel[™] B and D

2/16 lb. jugs per case

A super absorbent co-polymer of acrylamide gel, AquaGel[™] holds up to 400 times its weight in distilled water. An excellent water management tool for a variety of applications, it is ideal for laying sod, hydro-seeding, landscaping and as a root dip for transplants. AquaGel[™] ensures plants get the water they need at the critical stage of establishment.

TYPICAL APPLICATION RATE:

SODDING – AquaGel[™] B

50 lbs./acre

HYDROSEEDING – AquaGel[™] D

10 lbs./acre



BioPrime[™]

BioPrime[™] biostimulant is designed to address issues affecting long-term plant vitality. With a guaranteed analysis of 18-0-0, its four active ingredients include slow-release nitrogen, seaweed extract, humic acid and Endo Mycorrhizae. The nitrogen's proprietary release technology is ideally suited to revegetation of bare soils. Depending on the amount of rainfall and biological soil activity on a site, the nitrogen is released for 9 to 17 months.

TYPICAL APPLICATION RATE:

40 lbs. - 160 lbs./ acre



NeutraLime[™] Dry

40 lb. bag

NeutraLime[™] Dry promotes germination and enhances plant establishment. A super high concentrate of the purest form of limestone, the formula in NeutraLime[™] extends effectiveness from 12 to 18 weeks. Increasing the pH to 6.0+ dramatically improves the nutrient uptake efficiency of the plant. Independent lab analysis showed NeutraLime[™] raised the pH by 1.0 point within 10 days of soil treatment. Nothing balances soil pH faster, within 6-10 days after application, with the added plus of longer control. One 40 lb. bag contains 50% more CaCO₃ than the highest concentrated 2.5 gallon jug of Liquid Lime.

TYPICAL APPLICATION RATE:

pH Range 5.9 - 6.2 40 lbs. / acre

pH Range 5.5-5.8 80 lbs. / acre

pH Range 5.1-5.4 160 lbs. / acre

pH Range 4.7 - 5.0 240 lbs. / acre

pH Range 4.2 - 4.6 400 lbs. / acre



SlikColor[™]

2/11 lb. jugs per case

An additive for hydro-seeding to enhance the color for great curb appeal. SlikColor[™] improves visual metering when applying seed and fertilizer alone. The only marker dye with the added plus of poly-acrylamide which acts as hose slickifier to increase the shooting distance of any hydraulic slurry.

TYPICAL APPLICATION RATE:

Hydroseeding:

1lb./3,000 gallon

Straw Mulch Tacking:

2 lbs./3,000 gallon



Aqua-pHix[™]

2/2.5 gal jugs per case

This proprietary formulation of self-buffering, chelated organic and inorganic acids is designed to help manage alkaline soils (pH values >7.3). It is safe for people, animals and equipment, more effective and easier to use than any other acidifier on the market, and the most cost-efficient treatment available. Nothing else on the market today will modify alkaline soils faster than Aqua-pHix – its effect is immediate and is effective for 3-6 months (depending on precipitation).

TYPICAL APPLICATION RATE:

pH Range 8.7-9.210 gal. / acre

pH Range 8.0-8.65 gal. / acre

pH Range 7.4-7.92.5 gal. / acre

Target pH range is 6.3-7.3

DO NOT USE WITH BIO PRIME IN THE TANK



FlocLoc[™]

6/3 lb. jugs per case

A flocculating soil stabilizer, FlocLoc[™] coagulates soil particles suspended in water, dropping them from runoff. It reduces soil erosion and improves water infiltration into the seedbed. It also increases water-holding capacity of the hydroseeding slurry and improves machine performance. FlocLoc[™] can be used for temporary erosion and dust control. Just one 3 lb. jug will provide temporary stabilization to 1 acre of exposed soil.

TYPICAL APPLICATION RATE:

3 lbs./acre



Nautilus™ promotes drier and firmer playing surfaces; consistent, uniform root zone soil moisture; and a slower, more consistent dry down that reduces hand watering.

Application & Use Guidelines

Apply 6 fl oz per 1,000 ft² in minimum of 2 gal of water every 28 days. After application, irrigate sufficiently to remove product from leaf surfaces.

- For coarse soils/sand root zones:
Use 1/3" irrigation water
- For fine textured soils:
Use 2/10"-1/4" irrigation water

Nautilus employs our capped chemistry which is unique in how it attaches to hydrophobic soils to delivery lower soil moisture content while insuring a consistent dry down of the root zone.

- Provides firm, dry, and fast playing surfaces
- Enhances the efficacy and control of fertility and pesticide programs
- Creates consistent uniform soil moisture in the root zone
- Delivers a slower, consistent dry down that reduces hand watering

Mixing Directions

Mix Nautilus in spray tanks with water and proper agitation

NON PLANT FOOD INGREDIENTS

Active Ingredients:

84% Ethoxylated polypropylene glycols
4% Alcohol ethoxylates
12% Seaweed Extract

Size: 2/2.5 gal. Jug



Windjammer® treats Localized Dry Spots (LDS) while increasing moisture uniformity in the root zone. It can be used as a curative or as a monthly program product.

Application & Use Guidelines: Apply 4-6 fl oz per 1000 ft² in minimum of 2 gal of water every 28 days. After application, irrigate sufficiently to remove product from leaf surfaces.

- For coarse soils/sand root zones: Use 1/3" irrigation water
- For fine textured soils: Use 2/10"-1/4" irrigation water



Privateer™ treats Localized Dry Spots while increasing moisture uniformity in the root zone. Can be used as a curative or as a monthly program product.

Application & Use Guidelines

Apply 4 fl oz per 1,000 ft² in minimum of 2 gal of water every 28 days. After application, irrigate sufficiently to remove product from leaf surfaces.

- For coarse soils/sand root zones:
Use 1/3" irrigation water
- For fine textured soils:
Use 2/10"-1/4" irrigation water

Privateer is our blend of capped and straight block chemistries that promotes fast recovery from LDS and moisture stress.

- Treats and eliminates LDS
- Can be used as a treatment for LDS or for its prevention
- Maximizes water uniformity in the root zone
- Assists in rapid recovery of drought stressed turf

Mixing Directions

Mix Privateer in spray tanks with water and proper agitation

NON PLANT FOOD INGREDIENTS

Active Ingredients:

45% Alkoxyated polyalkylene glycols
39% Propoxyated polyethylene glycols
4% Polyoxyalkylene glycol alkyl ether
12% Seaweed Extract

Size: 2/2.5 gal. Jug

Mixing Directions

Mix Windjammer in spray tanks with water and proper agitation.

NON PLANT FOOD INGREDIENTS

Active Ingredients:

82% Blend of Ethylene Oxide/Propylene Oxide Copolymer Glycol Ethers
18% Seaweed Extract



Mariner™ promotes firmer and drier playing surfaces and improved root zone moisture uniformity when used in either a short or long term program.

Application & Use Guidelines

FOR SHORT-TERM USE: 4-6 fl oz/1,000 ft² in minimum of 2 gal of water every 28 days

FOR LONG-TERM USE (90 DAYS CONTROL):

Apply product at 8 fl oz per 1000 ft² in minimum of 2 gal of water. Follow up with second application of 8 fl oz per 1000 ft² in minimum of 2 gal of water 7-10 days later. After application, irrigate sufficiently to remove product from leaf surfaces.

- For coarse soils/sand root zones:
Use 1/3" irrigation water
- For fine textured soils:
Use 2/10"-1/4" irrigation water

Mariner uses our straight block chemistry.

- Provides firm, dry, and fast playing surfaces
- Improves the efficacy & control of fertility & pesticide programs
- For both long (90 days) or short term (14-28 days) use
- Delivers consistent uniform soil moisture in the root zone

Mixing Directions

Mix Mariner in spray tanks with water and proper agitation

NON PLANT FOOD INGREDIENTS

Active Ingredients:

84% Methyloxirane polymer with oxirane block
4% Polyoxyalkylene glycol alkyl ether
12% Seaweed Extract

Size: 2/2.5 gal. Jug

Compatibility Ocean Organics® Windjammer is compatible with fertilizers and most turf chemicals but should not be mixed directly with other chemicals. Do not combine Windjammer in a spray tank with pesticides or fertilizers unless prior use has shown the combination to be physically compatible, effective, and non-injurious under local conditions.

Size: 2/2.5 gal. Jug

Fairway/Tee's



Helmsman™ is a surfactant for use on fairways and fine soils. It increases the penetration of applied water and rainfall and improves irrigation efficiency. Helmsman addresses soil moisture problems on hillsides, mounds, and other difficult to access areas. It can be injected or sprayed.

Application & Use Guidelines Spray:

3 fl oz per 1,000 ft² every 28 days. After application, irrigate sufficiently to remove product from leaf surfaces.

- For coarse soils/sand root zones: Use 1/3" irrigation water
- For fine textured soils: Use 2/10"-1/4" irrigation water

For Injection: Apply 12-24 oz per acre once a week

Helmsman is a fairway product for fine textured soils.

- Greatly increase penetration of applied water and rainfall
- Improves irrigation efficiency
- Enhances the efficacy & control of fertility & pesticide programs
- Can be sprayed or injected

Mixing Directions

Mix Helmsman in spray tanks with water and proper agitation

NON PLANT FOOD INGREDIENTS

Active Ingredients:
17% Nonionic surfactant blend
10% Sequestering agent
73% Seaweed Extract

Size: 2/2.5 gal. Jug



TopSail® is a surfactant for use on fairways and fine soils. It increases the penetration of applied water and rainfall and improves irrigation efficiency. TopSail addresses soil moisture problems on hillsides, mounds, and other difficult to access areas. It can be injected or sprayed.

Application & Use Guidelines Spray:

32 fl oz per acre every 28 days. After application, irrigate sufficiently to remove product from leaf surfaces.

- For coarse soils/sand root zones: Use 1/3" irrigation water
- For fine textured soils: Use 2/10"-1/4" irrigation water
- Use 16 fl oz per acre for stand alone sprays.

For Injection: Apply 4-8 oz per acre once a week.

Mixing Directions

Mix TopSail in spray tanks with water and proper agitation.

NON PLANT FOOD INGREDIENTS

Active Ingredients:
26.5% Ethylene Oxide/Propylene Oxide Copolymer Ethylene Glycol Ether
26.5% Alkoxylated Polyalkylene Glycols
47% Seaweed Extract

Compatibility Ocean Organics® TopSail is compatible with fertilizers and most turf chemicals but should not be mixed directly with other chemicals. Do not combine TopSail in a spray tank with pesticides or fertilizers unless prior use has shown the combination to be physically compatible, effective, and non-injurious under local conditions.

Size: 2/2.5 gal. Jug

BENEFITS:

- Assists in the rapid recovery of drought/stressed turf and LDS
- Provides consistent uniform soil moisture and controls soil/water repellency
- Improves the efficacy and control of fertility & pesticide programs
- Greatly improves penetration of applied water and rainfall
- Improves irrigation efficiency
- Increases nutrient uptake
- Increases plant vigor and stress tolerance
- Promotes faster and more complete root development
- Aids water conservation

USE RATES:

Apply 2.5 lbs./1000 sq. ft. every 30 days or as needed for LDS control.

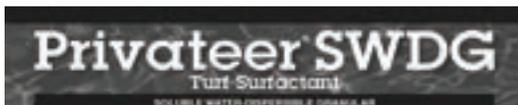
Size: 50 lb. BAG



Mariner Bio-Tabs

- Treats LDS
- Increases nutrient uptake
- Increases plant vigor and stress tolerance
- Promotes faster and more complete root development
- Aids water conservation
- **Mariner Bio-Tabs will maintain their integrity and will not "chunk," melt in sunlight or hot conditions, and will only dissolve under constant water pressure**

Size: 6 tabs per Carton

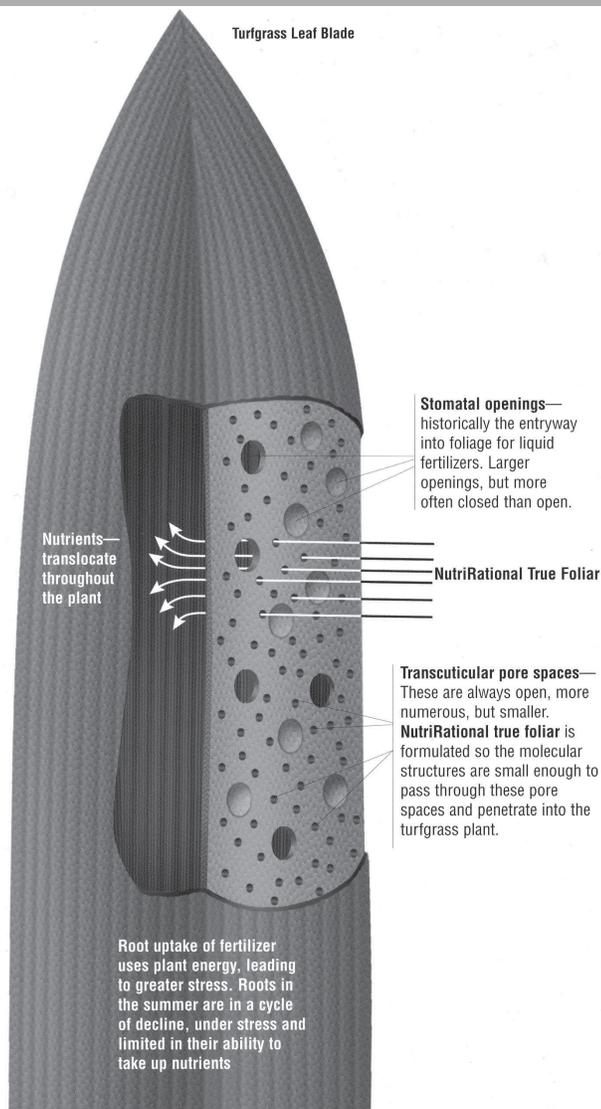


Privateer® SWDG provides consistent uniform soil moisture and controls soil/water repellency while improving the efficacy and control of fertility and pesticide programs. Our unique formulation includes our industry-leading seaweed extract for its benefits related to plant fitness and stress management. Privateer SWDG is phyto-safe and uses a patented granular dispersing technology.

NON PLANT FOOD INGREDIENTS

Active Ingredients:
10% Alkoxylated polyalkylene glycols, Propoxylated polyethylene glycols, polyoxyethylene glycol alkyl ether, Seaweed extract
90% DG Lite
100% TOTAL





Emerald Isle Solutions™

**NUTRI·RATIONAL®
TrueFoliar™**

Proven at Cornell University

Results: In an independent research trial at Cornell University in 2003, the Emerald Isle True Foliar® Nutritional Program provided great quality with extremely low inputs – 80% less N than other plots. The other fertility programs provided 3.5-4.0 lbs. of N per 1,000 sq. ft. from June to September, compared to a more appropriate seasonal amount of less than 1 lb. of N from Emerald Isle True Foliar® nutrition. Even though there was a large difference in the amount of N applied, there was no statistically significant difference in turf quality.

APPLICATION RATES:
3-4oz./1000 sq. ft. every 7-14 days

Nutri·Rational™ FOLIAR

Si

3·0·10
with Soluble Si

GUARANTEED ANALYSIS	
Total Nitrogen (N)	3.00%
0.58% Ammoniacal Nitrogen	
2.42% Urea Nitrogen	
Soluble Potash (K2O)	10.00%
Derived from: Urea, Ammonium Citrate, Potassium Alginate, Potassium Citrate, Potassium Carbonate and Potassium Acetate	
Also Contains Silica (Si)	1.00%
Also contains nonplant food ingredient: Minimum 45% Kelp Extract	
Ingredients: Urea, Ammonium Citrate, Potassium Alginate, Potassium Citrate, Potassium Carbonate, Potassium Acetate and Kelp Extract	

- Contains 45% Sea Plant Extract

Size: 2/2.5 gal. Jug

Nutri·Rational™ FOLIAR

N·P·K Plus

10·3·16
with Turf Micronutrients
and Phosphite

GUARANTEED ANALYSIS	
Total Nitrogen (N)	10.00%
9.00% Nitrate Nitrogen	
1.00% Urea Nitrogen	
Available Phosphate (P2O5)	3.00%
Soluble Potash (K2O)	16.00%
Derived from Ammonium Polyphosphate, Urea, Potassium Phosphite, Kelp Extract, and Potassium Citrate	

- Contains 30% Sea Plant Extract

Size: 2/2.5 gal. Jug

Nutri·Rational™ FOLIAR

N

19·1·6
with Turf Micronutrients

GUARANTEED ANALYSIS	
Total Nitrogen (N)	19.00%
5.50% Ammoniacal Nitrogen	
5.10% Nitrate Nitrogen	
8.40% Urea Nitrogen	
Available Phosphate (P2O5)	1.00%
Soluble Potash (K2O)	6.00%
Copper (Cu) (Actual)	0.10%
1.20% Water Soluble Copper (Cu)	
Iron (Fe) (Actual)	1.20%
1.20% Water Soluble Iron (Fe)	
Manganese (Mn) (Actual)	0.18%
0.18% Water Soluble Manganese (Mn)	
Zinc (Zn) (Actual)	0.15%
0.15% Water Soluble Zinc (Zn)	
Derived from Urea, Polymethylene Urea, Methylene Diurea, Ammonium Polyphosphate, Potassium Alginate, Potassium Citrate, Potassium Acetate, Ferrous Citrate, Manganese Nitrate, Zinc Sulfate, and Copper Sulfate	
Also contains nonplant food ingredient: Minimum 10% Kelp Extract	

- Contains 10% Sea Plant Extract

Size: 2/2.5 gal. Jug



PanaSeá Plus®

0-2-2
Liquefied Sea Plant Extract

GUARANTEED ANALYSIS

Available Phosphoric Acid (P₂O₅)2.00%
Soluble Potash (K₂O)2.00%
Derived from Kelp Extract, Phosphoric Acid

PanaSeá Plus® Liquefied Sea Plant Extract builds bigger, stronger root systems, increases turf tolerance to various stresses, improves quality and color and also accelerates seed germination. As its name implies, it is a solution for many of the common problems that affect golf courses and sports turf – problems that arise from the highly intensive maintenance regimens to which turf grasses are subjected, as well as seasonal stresses like heat and drought.

**The Result You Want:
Bigger, Better Roots**

The most important way PanaSeá Plus contributes to plant growth and health is through root establishment and root biomass development. This is because the health of the root system dictates the health of the plant.

Knowledgeable superintendents understand that the causes of problems start long before symptoms are visible. They understand the need for aggressive agronomic intervention and they start with programmed PanaSeá Plus applications as soon as they start mowing. The outcome is significantly healthier, denser, deeper root systems. Bigger, better root systems come from programmed applications of naturally occurring cytokinins and other beneficial constituents contained in PanaSeá Plus. PanaSeá Plus not only outperforms synthetic cytokinins, but also all other biostimulants.

During high stress periods when plants stop producing their own hormones, PanaSeá Plus provides necessary cytokinins to stimulate and sustain cell division in root tissue. This proactive biostimulation strategy helps to offset the negative impact on root development from shrinking internal cytokinin production. PanaSeá Plus is a proprietary blend of several liquefied sea plant extracts. It's also the richest single source – more than twice that of its nearest competitor – of naturally occurring cytokinins.

APPLICATION RATE:
4-8 oz./1,000 sq ft. per month

Size: 2/2.5 gal. Jug

FOR COMMERCIAL USE

XP Extra Protection

FOLIAR FERTILIZER FOR SUPERIOR STRESS MANAGEMENT

Application Guidelines

For Turf and Ornamentals: Apply 177 mL per 93 meters² (6 oz. per 1,000 ft²) every 14 days during the growing season. For large areas, apply 7.6 liters per 4,047 meters² (2 gal. per acre).

Apply in the early morning or late afternoon for best results. Use a spray adjuvant for superior coverage.

Allow foliar product to dry on plant prior to irrigation.

Mixing Guidelines

Shake or agitate before use. Fill mix tank with half of required spray water and turn on agitation. Measure product into tank, add remaining water and other soluble materials. Add a defoaming agent if desired, and adjust pH of tank-mix to neutral if necessary.

Compatibility

Ocean Organics products are compatible with most fertilizers and chemicals but should not be mixed directly with other chemicals. Mix in spray tanks with water and proper agitation. Conduct a jar test as needed to ensure compatibility with other products before tank mixing.

5-0-0

GUARANTEED ANALYSIS

Total Nitrogen (N) 5.0%
1.30% Water Soluble Nitrogen*
1.80% Urea Nitrogen
1.90% Nitrate Nitrogen
Magnesium (Mg) 1.0%
1.0% Water Soluble Magnesium (Mg)
Iron (Fe) 2.0%
0.3% Chelated Iron (Fe)
Manganese (Mn) 2.0%
2.0% Water Soluble Manganese (Mn)
Derived from: Urea, Plant Proteins, Magnesium Nitrate, Manganese Nitrate, Manganese Sulfate, Ferrous Sulfate, Iron EDTA, Kelp Extract
*1.30% from plant proteins F1762

Storage and Use

Store in original containers at temperatures between 10°C and 35°C (50°F and 90°F). To avoid contamination, do not return previously mixed product to original container. Use product within 12 months of original purchase date.

Caution

KEEP OUT OF REACH OF CHILDREN.
Harmful if swallowed. May cause

irritation. Avoid contact with eyes, skin, and clothing. Wear chemical resistant goggles and gloves. Do not take internally. Avoid inhaling mist or vapor. In case of contact with eyes, flush eyes with water for 15 minutes. If irritation occurs, seek medical attention.

Foliar fertilization is intended as a supplement to a regular fertilization program and may not, by itself, provide all the nutrients normally required by intended plants during the course of the year.

CONDITIONS OF SALE: The Manufacturer warrants only that product conforms to label description. Buyer and user agree to accept all liability associated with handling, use, and disposal of this product.

Not for use in organic crop and organic food production in the State of California.

Information regarding the contents and levels of metals in this product is available on the internet at <http://www.aapfco.org/metals.htm>



Ocean Organics®

P.O. Box 1448 • Waldoboro, ME 04572
888-312-0106 • www.oceanorganics.com

Corporate Office: Ann Arbor, MI

Lot Number: Net Contents : 9.46 L. (2.5 Gallons) Net Weight : 12.18 Kg. (26.8 Lbs)
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APPLICATION RATE:
6 oz./1,000 sq ft. every 2 weeks

- Amino acid-chelated micro nutrients
- Contains kelp extract
- Improves chlorophyll content
- Xanthophyll to protect from excessive sunlight exposure

Size: 2/2.5 gal. Jug



25•0•25

No Phosphate Special

GUARANTEED ANALYSIS	
Total Nitrogen (N)	25.00%
1.01% Ammoniacal Nitrogen	
7.58% Nitrate Nitrogen	
16.32% Urea Nitrogen	
Soluble Potash (K₂O)	25.00%
Magnesium (Mg)	0.05%
Sulfur (S)	1.40%
1.40 Combined Sulphur (S)	
Boron (B)	0.02%
Copper (Cu)	0.05%
0.05 Water Soluable Copper (Cu)	
Iron (Fe)	0.10%
0.10 Chelated Iron (Fe)	
Manganese (Mn)	0.05%
0.05 Water Soluable Manganese (Mn)	
Molybdenum (Mo)	0.0009%
Zinc (Zn)	0.05%
0.05 Water Soluable Zinc (Zn)	
Derived from Ammonium Sulfate, Potassium Nitrate, Magnesium Sulfate, Urea, Borax, Sodium Molybdate, Copper Sulfate, Iron EDTA, Manganese Sulfate and Zinc Sulfate.	
Potential acidity equivalent to 427 lbs.	

APPLICATION RATE:
8oz./1,000 sq. ft. to supply
1/8 lb. N every 14 days
Size: 25 lb. BAG

16•45•7

Seed Starter Special

GUARANTEED ANALYSIS	
Total Nitrogen (N)	16.00%
6.45% Ammoniacal Nitrogen	
9.55% Urea Nitrogen	
Available Phosphate (P₂O₅)	45.00%
Soluble Potash (K₂O)	7.00%
Boron (B)	0.02%
Copper (Cu)	0.05%
0.05% Chelated Copper	
Iron (Fe)	0.10%
0.10% Chelated Iron	
Manganese (Mn)	0.05%
0.05% Chelated Manganese	
Molybdenum (Mo)	0.001%
Zinc (Zn)	0.05%
0.05% Chelated Zinc	
Derived from Potassium Phosphate, Ammonium Phosphate, Urea, Borax, Sodium Molybdate, and Copper, Iron, Manganese and Zinc EDTA.	
Potential acidity equivalent to 959 lbs. calcium carbonate per ton	

APPLICATION RATE:
36oz./1,000 sq. ft. to supply
1lb. phosphorous
Size: 25 lb. BAG



12•4•5

with Turf Micronutrients

GUARANTEED ANALYSIS	
Total Nitrogen (N)	12.00%
5.25% Urea Nitrogen	
0.65% Ammoniacal Nitrogen	
6.10% Water Insoluble Nitrogen*	
Available Phosphate (P₂O₅)	4.00%
Soluble Potash (K₂O)	5.00%
Calcium (Ca)	4.50%
Magnesium (Mg)	0.50%
0.50% Water Soluble Magnesium (Mg)	
Iron (Fe)	0.50%
0.50% Water Soluble Iron (Fe)	
Derived from: Kelp Meal, Fish Meal, Crab Meal, Poultry Meal, Blood Meal, Alfalfa meal, Potassium Sulfate, Rock Phosphate, Magnesium Sulfate, Ferrous Sulfate, Urea, Methylene Urea, and Monoammonium Phosphate.	
*6.1% Slowly Available Nitrogen.	

APPLICATION RATE:
8 lbs./1,000 sq. ft. to supply
1lb. of nitrogen
Size: 50 lb. BAG



12•0•12

with Turf Micronutrients

GUARANTEED ANALYSIS	
Total Nitrogen (N)	12.00%
8.00% Water Soluble Nitrogen	
4.00% Water Insoluble Nitrogen*	
Soluble Potash (K₂O)	12.00%
Calcium (Ca)	2.60%
Magnesium (Mg)	0.60%
0.60% Water Soluble Magnesium (Mg)	
Iron (Fe)	0.60%
0.60% Water Soluble Iron (Fe)	
Manganese (Mn)	0.05%
0.50% Water Soluble Manganese (Mn)	
Zinc (Zn)	0.05%
0.50% Water Soluble Zinc (Zn)	
Derived from: Kelp Meal, Fish Meal, Crab Meal, Feather and Alfalfa Meals, Sunflower Hull Ash, Rock Phosphate, Potassium Sulfate, Magnesium Sulfate, Manganese Sulfate, Zinc Sulfate, Urea, Methylene Urea	
*4.0% Slowly Available Nitrogen.	

APPLICATION RATE:
8 lbs./1,000 sq. ft. to supply
1lb. of nitrogen
Size: 50 lb. BAG



6•4•0

with Turf Micronutrients

GUARANTEED ANALYSIS	
Total Nitrogen (N)	6.00%
2.00% Water Soluble Nitrogen	
4.00% Water Insoluble Nitrogen*	
Available Phosphate (P₂O₅)	4.00%
Calcium (Ca)	1.20%
Iron (Fe)	2.50%
Derived from processed sewage *4.0% Slowly available Nitrogen derived from processed sewage	

APPLICATION RATE:
16 lbs./1,000 sq. ft. to supply
1lb. of nitrogen

• Greens Grade
Size: 50 lb. BAG

Fertilizers

Spring and Early Summer Care for Your Newly Seeded Lawn

- 1) Keep the surface of the soil moist with a light watering (avoiding puddles) when daytime high temperatures are 65 degrees F and above. If the daily high temperatures are less than 65 degrees F, turfgrass seed will not germinate.
- 2) Water ONLY between 5:00 AM and 5:00 PM. Evening/Night watering has a tendency to promote disease, which will quickly kill seedlings. A clear, hot and windy day may require watering every hour in order to keep the soil moist. Natural rain alone is not enough water to activate seed germination. It will only reduce the number of times you need to water.
- 3) Fertilize the area 3 to 4 weeks after germination begins (ONLY if high temperatures are below 80 degrees F). Use a fertilizer labeled specifically for turfgrass lawns. Apply according to the instructions and continue to water. All seeds do not germinate at the same time. Your area has been seeded with a mixture that has multiple species of turf grasses that vary significantly in germination times.
- 4) Mow seedlings and weeds when they reach 3 to 4 inches in height. Yes, you will get weeds, they are unavoidable. Mowing will significantly reduce your population of weeds over time. You can apply weed control products when grass reaches 3 to 4 months in maturity. DO NOT apply weed control when temperatures are above 80 degree F, or you may burn and injure the turfgrass. September and October are the optimum months to apply weed control products.
- 5) New turfgrass lawns require 1 to 2 years to fully mature. BE PATIENT. If seed did not germinate in the late Fall or Summer, it may lay dormant, waiting for the proper conditions to germinate (65 to 80 degrees F). Be ready to water when that occurs.



Preferred Seed's Best & Brightest

OPTION 1 (GOOD)

1 STEP PROCESS

- Spring Planting (April/early May) is recommended for this process. This allows for better survival of wildflowers through the following winter.
- Apply glyphosate, wait at least one week and cultivate soil in order to eradicate existing vegetation.
- Test pH and adjust to neutral (6.0-7.0) using either sulfur or lime as per university recommendations. Till into soil.
- Apply wildflowers at a rate of 5-10# per acre and Low-Gro Mix at a rate of 125-250# per acre. The higher seeding rate will result in improved weed suppression. These items can be mixed together for ease of application. The grass mix will serve as a permanent nurse crop which can minimize weed pressure.
- Apply starter fertilizer 18-24-12 at a rate of 250# per acre.
- Rake seed and fertilizer into soil to a depth of 1/4" to 1/2" using a garden/leaf rake or drag with a harrow/box spring/chain link fence.
- Culti-pac soil using a V-shaped roller or drive over area with ATV tires. This will assure good seed to soil contact as well as create depressions to hold water for better germination.
- Mulch area with Straw (Wheat, Rye or Oats) to assist with moisture retention as well as warming the soil. **DO NOT USE HAY.** This contains many perennial weeds which can be difficult to control.
- If possible, water twice daily for 20-30 minutes. The first time can be around 5:00-9:00 am and the second time can be around 2:00 -4:00 pm.
- Maintain each year with a fall mowing to a height of 3"-5" in order to discourage weeds and to spread the annual wildflower seeds for germination next spring.

After 4-5 years the site can become very weedy. At this point you may choose to mow area down in September, collect or re-mow excessive clipping debris, wait 2 weeks for re-growth and apply a selective broadleaf herbicide similar to one you would use on your lawn (like Weed-be-Gone). The grass mix will be unaffected by the herbicide and by this time will be established well enough to restrict weeds more effectively. This application will also kill the remaining wildflowers so you will need to reseed them the following late winter/early spring. This is called Frost Seeding. Your timing would be late February-early April. Ideally you want frozen ground and even on top of snow cover. Generally your second wildflower seeding will be your best due to more effective weed control with an established grass cover.

OPTION 2 (BEST)

2 STEP PROCESS

- Late Summer (early to mid August) is recommended for this process. This allows for better establishment of the nurse grasses which can result in better weed suppression.
- Apply glyphosate during a period of active growth, wait at least one week and then cultivate soil in order to eradicate existing vegetation. An alternative method to glyphosate is to rototill the soil every other week for 4-6 weeks prior to planting beginning in late June or early July.
- Test soil pH and adjust to neutral (6.0-7.0) using either sulfur or lime as per university recommendations. Rototill into soil to a depth 3"-6".
- Apply Low-Gro Mix at a rate of 125#-250# per acre as a nurse grass. The higher seeding rate will result in better weed suppression. Also apply starter fertilizer 18-24-12 at a rate of 250# per acre. Rake both into the soil to a depth of 1/4" to 1/2" using a garden/leaf rake or drag with a harrow/box spring/chain link fence.
- Culti-pac soil using a V-shaped roller or drive over area with ATV tires. This will assure good seed to soil contact as well as create depressions to hold water for better germination.
- Mulch area with Straw (Wheat, Rye or Oats) to assist in water retention. **DO NOT USE HAY.** This contains many perennial weeds which can be difficult to control.
- If possible, water twice daily for 20-30 minutes. The first time can be around 5:00-9:00 am and the second time can be around 2:00-4:00 pm.
- As soon as germination occurs, fertilize with high nitrogen granular fertilizer such as 30-0-08 at a rate of 150#/acre and repeat every 3 weeks through the end of October. Also, mow this area to a height of 2"-3" as needed in order prevent weed growth from producing seed heads. Continue mowing until winter.
- After the first frost of the Fall, spray a selective broad-leaf herbicide similar to one you would use on your home lawn (like Weed-be-Gone). This will eradicate most of the new weeds that emerge after seeding.
- Seed area with 5#-10# per acre of wildflowers between late February and the first week of April. This is called a frost seeding and is best on frozen ground. Application can be made on bare soil as well as on top of snow cover. Frost heaving will fracture the soil and create good seed to soil contact.
- Maintain each year with a fall mowing to a height of 3"-5" in order to discourage weeds and to spread the annual wildflower seeds for germination the following spring.



Planting and Grow-in Instructions Low-Gro and Golf Low-Gro Mixtures in Secondary Rough

- Eradicate all existing vegetation through cultivation and/or use of herbicides
- Seed using either mixture at 6 lbs./1,000 sq. ft.
- Fertilize using 18-24-12 with Excelis Maxx Starter Fertilizer at 5.5 lbs./1,000 sq. ft.
- Water as you would any new seeding. Expect Low-Gro Mixture to require 2-3 weeks to begin to germination. Golf Low-Gro Mixture can begin to germinate in 7-10 days due to the Turf Type Annual Ryegrass component.
- Immediately upon germination, fertilize using 30-0-08 with Excelis Maxx at 3.3lbs./1,000 sq. ft. (1lb.N/1,000 sq. ft.). Repeat this same fertilizer rate of application every 4 weeks during growing season until soil is covered with desirable grasses. This may require 4-6 applications to complete the grow-in.
- Mow at height of 3" during the grow-in process in order to discourage weeds and coarse grasses from becoming established. They are likely already in the soil and will outgrow the Fine Fescues during establishment. This process may require a year or more of mowing and fertilizing before it is advisable to allow the Fescues to grow to seed head development stage. This is important to minimize the amount of seeds that the weeds and coarse grasses produce. It also allows for easier broadleaf herbicide treatments.
- Upon completion of grow-in, discontinue all fertilizing and watering. This will allow Fine Fescues to maintain less density for better playability.
- Mowing is required at the end of each season. Mow to approximately 4" being careful to avoid scalping or scarring soil on severe undulations. This could allow unwanted weed growth. If area has relatively heavy soil, sweeping and collecting clippings may assist in minimizing thick growth by reducing organic matter accumulation. To maintain the thinnest possible stand, mowing in spring is recommended but preferably before April 15th to maximize seed head development.

1	SUMMER GREEN SUPREME MIXTURE				2
	SEEDING RATE: 8 lbs. Per 1,000 sq. ft.				
3	Lot # PS30013A			Tested: 01/2023	4
5	Purity	Variety	Germ	Origin	
	19.94	4TH MILLENNIUM SRP TALL FESCUE	85	OR	7
	19.91	REBOUNDER TALL FESCUE	90	OR	
	19.89	TRAVERSE 2 SRP TALL FESCUE	85	OR	
	14.96	FAYETTE TALL FESCUE	85	OR	8
	9.86	PALMETTO TURF TYPE ANNUAL RYEGRASS	90	OR	
	9.76	GREEN SUPREME PERENNIAL RYEGRASS	90	CAN	
	4.96	BROOKLAWN KENTUCKY BLUEGRASS	85	OR	
9	Noxious Weeds: None Found	Sell by: 04/2024			15
11	Other crop: 0.13	Inert: 0.58			12
10	Weeds: 0.01	Net Wt.: 50 lbs.			13
	Preferred Seed Co. 575 Kennedy Rd., Buffalo NY 14227				14

1 NAME

Identifies the seed mixture, blend, variety or species contained in the package.

2 SEEDING RATE

The amount of seed by weight per given area required to establish a new lawn on bare soil in a reasonable amount of time, typically a complete fall and spring season. If overseeding, reduce seeding rate by half.

3 LOT NUMBER

Number assigned when packaging the variety, mixture or blend. Needed for tracing purposes.

4 TEST DATE

The date seed purity and germination were tested. Qualifies seed lot for sale in New York for 15 months. Other state seed laws may vary.

5 PURITY

Percentages indicate the proportion of the seed variety or species by weight, not seed count.

6 SEED TYPE

Identifies the seed species and cultivar (variety) contained in the package.

7 GERMINATION

Percentages represent the amount of viable seeds that germinate under ideal conditions. This varies with the grass species.

8 ORIGIN

When seed quantities account for more than 5 percent of the mixture or blend, the label must show the state or country where the seed crop was grown. This has no bearing on grass adaptation.

9 NOXIOUS WEEDS

These are troublesome weeds. In most states it is illegal to sell seed that contains noxious weeds. When present, they must be individually named and the number of seeds per pound indicated.

10 OTHER CROP

These are seeds from any commercially grown crop. They may be other desirable grasses which comprise less than 5% of the mixture or blend, or problem grasses such as orchard grass in a lawn mixture.

11 WEEDS

It is virtually impossible to clean all weed seeds out of a seed lot. State laws regulate which plants are considered weeds. These are generally weeds which are easily controlled or mowed out.

12 INERT

The chaff, dirt and miscellaneous material that manages to escape the cleaning process.

13 NET WEIGHT

The total weight of the contents, exclusive of the packaging.

14 COMPANY NAME & ADDRESS

Identifies the name and address of the company which packaged or is selling the seed lot.

15 SELL BY

The month and year seed must be sold by. Seed may be retested and relabeled only once.



ALFALFA

AmeriStand 481
AmeriStand 420LH
AAC Trueman
Dominator
Double Shot
Hopper Safe 55
Northeast Premium Blend
Reload Branch Rooted
Triple Threat Blend

CLOVER

Alsike
Berseem
Crimson
Domino White
Dutch White
Dynamite Red
FIXatioN Balansa
Gallant Red
Jumbo Ladino
Ladino
Mammoth Red
Medium Red
MicroClover
White
White Blossom Sweet
Yellow Blossom Sweet

TIMOTHY

PS 2000 Brand
Select Climax
Sunrise II Brand
Sunset II Brand

TREFOIL

Nordic Birdsfoot Trefoil

WILDLIFE & NATIVE GRASSES

Bluestem
Deertongue
Indiangrass
Switchgrass
Wildrye

**ANNUAL FORAGE, SMALL
GRAIN & COVER CROPS**

Buckwheat
Field/Winter Peas
Forage Oats
Millet
Mustard
Oats
Radish
Sorghum
Sorghum Sudangrass
Soybeans
Spelt
Spring & Fall Barley
Teff Grass
Winter Rye
Winter/Spring Triticale
Winter/Spring Wheat

BRASSICAS

Barley
Chicory
Forage Turnip
Kale
Rape
Swede
Turnip
Winter Canola

FORAGE GRASSES

Crown Royale Orchardgrass
Diceris Orchardgrass
Echelon Orchardgrass
Revive Orchardgrass Blend
Festulolium
Forage Kentucky Bluegrass
Italian Ryegrass
Meadow Brome Grass
Meadow Fescue
Reed Canarygrass
Smooth Brome Grass
Tall Fescue
Teff Grass
Tetraploid Perennial Ryegrass

**PS FORAGE EXTRA PASTURE
& SPECIAL MIXES**

Kentucky Horse Pasture Mix
Livestock Grass Mix
Orchard & Vineyard Mix
Pasture Refresher Mix
Permanent Pasture Mix

PS FORAGE EXTRA HAY MIXES

Advantage Mix ATC
Bale Mix ATR
Bunkbuster Mix AT
Economy Mix
Hay Mix TAR
High Caliber Hay Mix
Horse Haymaker Mix
Lowland Mix
Manure Eater Mix
Maximum Milk Mix
Meadow Mix ATT
T & A (Timothy/Alsike) Mix
Wet Soil Mix

COVER CROP MIXES

Clover Overseed Mix

FORAGE SEED INOCULANTS

N-Dure (OMRI)
Pre-Vail (OMRI)
Exceed (OMRI)
Exceed Garden Combination

SOYBEAN & PEA INOCULANT

N-Dure (OMRI)
N-Charge
N-Take

SWEET CORN

Trinity 70 Day
Sugar Buns 72 Day
Ambrosia 75 Day
Bodacious R/M 75 Day
Honey & Cream 84 Day
Incredible R/M 85 Day
Silver Duchess 78 Day



PREFERRED SEED

Preferred Seed, Preferred Results

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FAX 716-895-3421

