

MASSDOT UPLAND SEED MIXES

DESIGNER: Please review the MassDOT Native Upland Seeding Guidance when selecting a mix. Please consult with MassDOT Landscape Design regarding changes to the mixes, substituting species due to lack of availability, or for custom mixes.

Per the Seeding Specifications, all species shall be closest available ecotype to Massachusetts.

765.411 Short Grassland Mix			
	<u>Botanical Name</u>	<u>Common Name</u>	<u>% PLS by Weight</u>
Grass	Schizachyrium scoparium 'Albany Pine'	Little Bluestem 'Albany Pine'	57.00%
	Elymus virginicus	Virginia Wild Rye	27.00%
	Festuca rubra	Creeping Red Fescue	9.00%
	Agrostis perennans	Upland Bentgrass	1.20%
	Dichanthelium clandestinum 'Tioga'	Deertongue grass 'Tioga'	1.00%
	Eragrostis spectabilis 'RI Ecotype'	Purple Lovegrass 'RI Ecotype'	1.00%
			96.20%
Herb/Forb	Chamaecrista fasciculata	Partridge Pea	2.30%
	Penstemon digitalis	Beard-tongue	0.50%
	Solidago nemoralis	Grey Goldenrod	0.30%
	Aster pilosus	Heath Aster	0.10%
	Pycnanthemum tenuifolium	Slender Mountain Mint	0.10%
	Oenothera fruticosa var. fruticosa	Sundrops	0.10%
	Achillea millefolium	Common Yarrow	0.10%
	Aster lateriflorus	Calico Aster	0.10%
	Solidago bicolor	White Goldenrod	0.10%
	Aster laevis NY Ecotype	Smooth Aster NY Ecotype	0.10%
			3.80%
			100.00%
Seeding Rate: 15.0 lbs PLS/Acre			

765.412 Short Grassland Mix-Sandy Soil			
	<u>Botanical Name</u>	<u>Common Name</u>	<u>% PLS by Weight</u>
Grass	Festuca ovina	Sheep Fescue	55.00%
	Schizachyrium scoparium 'Albany Pine'	Little Bluestem 'Albany Pine'	28.30%
	Elymus virginicus	Virginia Wild Rye	13.00%
	Eragrostis spectabilis 'RI Ecotype'	Purple Lovegrass 'RI Ecotype'	1.00%
			97.30%
Herb/Forb	Chamaecrista fasciculata	Partridge Pea	1.00%
	Linum perenne lewisii	Blue Flax	0.80%
	Aster laevis NY Ecotype	Smooth Aster NY Ecotype	0.20%
	Rudbeckia hirta-VT ecotype	Black-eyed Susan-VT ecotype	0.20%
	Achillea millefolium	Common Yarrow	0.10%
	Aster pilosus	Heath Aster	0.10%
	Pycnanthemum tenuifolium	Slender Mountain Mint	0.10%
	Solidago nemoralis	Grey Goldenrod	0.10%
	Asclepias tuberosa	Butterfly Milkweed	0.10%
			2.70%
			100.00%
Seeding Rate: 45.0 lbs PLS/Acre			

765.413 Roadside Pollinator Meadow Mix

	<u>Botanical Name</u>	<u>Common Name</u>	<u>% PLS by Weight</u>
Grass	Schizachyrium scoparium	Little Blue Stem	54.00%
	Elymus virginicus	Virginia Wild Rye	28.00%
	Eragrostis spectabilis 'RI Ecotype'	Purple Lovegrass 'RI Ecotype'	1.00%
	Agrostis perennans	Upland Bentgrass	0.20%
			83.20%
Herb/Forb	Echinacea purpurea	Purple Coneflower	4.00%
	Chamaecrista fasciculata	Partridge Pea	3.00%
	Linum perenne lewisii	Blue Flax	2.00%
	Coreopsis lanceolata	Lance-leaf Coreopsis	2.00%
	Penstemon digitalis	Beard-tongue	1.00%
	Aster laevis NY Ecotype	Smooth Aster NY Ecotype	0.80%
	Asclepias tuberosa	Butterfly Milkweed	0.60%
	Rudbeckia hirta-VT ecotype	Black-eyed Susan-VT ecotype	0.60%
	Aster pilosus	Heath Aster	0.50%
	Solidago nemoralis	Grey Goldenrod	0.50%
	Aster lateriflorus	Calico Aster	0.50%
	Monarda fistulosa	Wild Bergamot	0.50%
	Symphotrichum ericoides	White Heath Aster	0.30%
	Solidago juncea	Early Goldenrod	0.20%
	Pycnanthemum tenuifolium	Slender Mountain Mint	0.20%
	Achillea millefolium	Common Yarrow	0.10%
			16.80%
			100.00%
	<i>Seeding Rate: 20.0 lbs PLS/Acre</i>		

765.415 Native Short Grassland Mix

	<u>Botanical Name</u>	<u>Common Name</u>	<u>% PLS by Weight</u>
Grass	Schizachyrium scoparium	Little Blue Stem	56.10%
	Elymus virginicus	Virginia Wild Rye	28.00%
	Dichanthelium clandestinum 'Tioga'	Deertongue grass 'Tioga'	8.00%
	Eragrostis spectabilis 'RI Ecotype'	Purple Lovegrass 'RI Ecotype'	2.00%
	Agrostis perennans	Upland Bentgrass	1.50%
	Juncus tenuis	Path Rush	0.10%
			95.70%
Herb/Forb	Chamaecrista fasciculata	Partridge Pea	3.00%
	Solidago nemoralis	Grey Goldenrod	0.30%
	Penstemon digitalis	Beard-tongue	0.30%
	Achillea millefolium	Common Yarrow	0.10%
	Oenothera fruticosa var. fruticosa	Sundrops	0.10%
	Pycnanthemum tenuifolium	Slender Mountain Mint	0.10%
	Aster pilosus	Heath Aster	0.10%
	Aster laevis NY Ecotype	Smooth Aster NY Ecotype	0.10%
	Solidago bicolor	White Goldenrod	0.10%
	Aster lateriflorus	Calico Aster	0.10%
			4.30%
			100.00%
	<i>Seeding Rate: 15.0 lbs PLS/Acre</i>		

765.421 Mid-Height Grassland Mix

	<u>Botanical Name</u>	<u>Common Name</u>	<u>% PLS by Weight</u>
Grass	Schizachyrium scoparium 'Albany Pine'	Little Bluestem 'Albany Pine'	48.00%
	Elymus virginicus	Virginia Wild Rye	20.00%
	Panicum virgatum	Switch Grass	10.00%
	Elymus canadensis	Canada Wild Rye	8.00%
	Dichanthelium clandestinum 'Tioga'	Deertongue grass 'Tioga'	3.00%
	Agrostis perennans	Upland Bentgrass	2.00%
			91.00%
Herb/Forb	Chamaecrista fasciculata	Partridge Pea	3.00%
	Penstemon digitalis	Beard-tongue	2.00%
	Geum canadense	White Avens	1.00%
	Liatris scariosa	Northern Blazing Star	0.50%
	Baptisia tinctoria	Wild Indigo	0.30%
	Monarda fistulosa	Wild Bergamot	0.30%
	Aster laevis NY Ecotype	Smooth Aster NY Ecotype	0.20%
	Aster lateriflorus	Calico Aster	0.20%
	Asclepias syriaca	Common Milkweed	0.20%
	Solidago nemoralis	Grey Goldenrod	0.20%
	Aster prenanthoides	Zig Zag Aster	0.20%
	Pycnanthemum tenuifolium	Slender Mountain Mint	0.20%
	Asclepias incarnata	Swamp Milkweed	0.20%
	Lespedeza capitata	Roundhead Bush Clover	0.20%
	Solidago juncea	Early Goldenrod	0.10%
	Aster pilosus	Heath Aster	0.10%
	Solidago bicolor	White Goldenrod	0.10%
			9.00%
			100.00%
	Seeding Rate: 18.0 lbs PLS/Acre		

765.423 Mid-Height Pollinator Mix			
	<u>Botanical Name</u>	<u>Common Name</u>	<u>% PLS by Weight</u>
Grass	Schizachyrium scoparium 'Albany Pine'	Little Bluestem 'Albany Pine'	46.00%
	Elymus riparius	Riverbank Wild Rye	21.00%
	Andropogon gerardii NY Eco	Big Bluestem NY Eco	7.00%
	Panicum virgatum	Switch Grass	5.00%
	Agrostis perennans	Upland Bentgrass	0.20%
			79.20%
Herb/Forb	Echinacea purpurea	Purple Coneflower	6.00%
	Chamaecrista fasciculata	Partridge Pea	2.50%
	Linum perenne lewisii	Blue Flax	2.00%
	Coreopsis lanceolata	Lance-leaf Coreopsis	2.00%
	Penstemon digitalis	Beard-tongue	2.00%
	Desmodium canadense	Showy Tick Trefoil	1.20%
	Rudbeckia triloba	Brown Eyed Susan	0.80%
	Liatris scariosa	Northern Blazing Star	0.60%
	Rudbeckia hirta-VT ecotype	Black-eyed Susan-VT ecotype	0.50%
	Asclepias incarnata	Swamp Milkweed	0.40%
	Aster novae-angliae	New England Aster	0.30%
	Aster laevis NY Ecotype	Smooth Aster NY Ecotype	0.30%
	Aster lateriflorus	Calico Aster	0.30%
	Monarda fistulosa	Wild Bergamot	0.30%
	Aster pilosus	Heath Aster	0.30%
	Ratibida pinnata	Grey-head coneflower	0.30%
	Solidago nemoralis	Grey Goldenrod	0.20%
	Solidago juncea	Early Goldenrod	0.20%
	Pycnanthemum tenuifolium	Slender Mountain Mint	0.20%
	Solidago rigida	Rigid Goldenrod	0.20%
	Solidago odora	Licorice Scented Goldenrod	0.20%
			20.80%
			100.00%
Seeding Rate: 20.0 lbs PLS/Acre			

765.431 Tall Grassland Mix			
	<u>Botanical Name</u>	<u>Common Name</u>	<u>% PLS by Weight</u>
Grass	Elymus virginicus	Virginia Wild Rye	28.00%
	Andropogon gerardii NY Eco	Big Bluestem NY Eco	26.00%
	Schizachyrium scoparium	Little Blue Stem	18.00%
	Panicum virgatum	Switchgrass	10.00%
	Sorghastrum nutans New England 2 Ecotype	Indiangrass New England 2 Ecotype	10.00%
	Agrostis perennans	Upland Bentgrass	1.00%
			93.00%
Herb/Forb	Desmodium canadense	Showy Tick Trefoil	2.00%
	Chamaecrista fasciculata	Partridge Pea	2.00%
	Penstemon digitalis	Beard-tongue	0.80%
	Aster lateriflorus	Calico Aster	0.30%
	Monarda fistulosa	Wild Bergamot	0.20%
	Asclepias syriaca	Common Milkweed	0.20%
	Pycnanthemum tenuifolium	Slender Mountain Mint	0.20%
	Asclepias incarnata	Swamp Milkweed	0.20%
	Aster laevis NY Ecotype	Smooth Aster NY Ecotype	0.20%
	Aster novae-angliae	New England Aster	0.20%
	Heliopsis helianthoides	Ox-Eye Sunflower	0.20%
	Verbena hastata	Blue Vervain	0.10%
	Solidago juncea	Early Goldenrod	0.10%
	Aster pilosus	Heath Aster	0.10%
	Solidago speciosa	Showy Goldenrod	0.10%
	Solidago odora	Licorice Scented Goldenrod	0.10%
			7.00%
			100.00%
<i>Seeding Rate: 18.0 lbs PLS/Acre</i>			

765.442 Roadside Riverbank Mix

	<u>Botanical Name</u>	<u>Common Name</u>	<u>% PLS by Weight</u>
Grass	Elymus virginicus	Virginia Wild Rye	28.00%
	Schizachyrium scoparium 'Albany Pine'	Little Bluestem 'Albany Pine'	22.00%
	Elymus riparius	Riverbank Wild Rye	14.70%
	Andropogon gerardii NY Eco	Big Bluestem NY Eco	14.00%
	Panicum virgatum	Switch Grass	5.00%
	Dichanthelium clandestinum 'Tioga'	Deertongue grass 'Tioga'	5.00%
	Carex vulpinoidea	Fox Sedge	2.00%
	Agrostis perennans	Upland Bentgrass	1.50%
	Carex vulpinoidea	Fox Sedge	0.50%
	Poa palustris	Fowl Bluegrass	0.30%
	Juncus effusus	Soft Rush	0.10%
	Juncus tenuis	Path Rush	0.10%
			93.20%
Herb/Forb	Chamaecrista fasciculata	Partridge Pea	3.00%
	Penstemon digitalis	Beard-tongue	1.00%
	Verbena hastata	Blue Vervain	0.40%
	Aster puniceus	Aster - Swamp	0.40%
	Aster cordifolius	Blue Wood Aster	0.30%
	Asclepias incarnata	Swamp Milkweed	0.30%
	Desmodium canadense	Showy Tick Trefoil	0.30%
	Monarda fistulosa	Wild Bergamot	0.20%
	Aster novae-angliae	New England Aster	0.20%
	Solidago rigida	Rigid Goldenrod	0.20%
	Eupatorium maculatum	Spotted Joe Pye Weed	0.10%
	Solidago juncea	Early Goldenrod	0.10%
	Euthamia graminifolia	Grass-leaved Goldenrod	0.10%
	Eupatorium perfoliatum	Boneset	0.10%
	Pycnanthemum tenuifolium	Slender Mountain Mint	0.10%
			6.80%
			100.00%
<i>Seeding Rate: 15.0 lbs PLS/Acre</i>			

765.451 Part Shade Roadside Mix

	<u>Botanical Name</u>	<u>Common Name</u>	<u>% PLS by Weight</u>
Grass	Festuca rubra	Creeping Red Fescue	25.70%
	Elymus virginicus	Virginia Wild Rye	24.00%
	Schizachyrium scoparium	Little Blue Stem	22.50%
	Panicum virgatum	Switch Grass	10.00%
	Panicum clandestinum 'Tioga'	Deer Tongue 'Tioga'	7.00%
	Carex vulpinoidea	Fox Sedge	2.00%
	Agrostis perennans	Upland Bentgrass	2.00%
	Juncus effusus	Soft Rush	0.20%
			93.40%
Herb/Forb	Chamaecrista fasciculata	Partridge Pea	3.00%
	Penstemon digitalis	Beard-tongue	1.00%
	Zizia aurea	Golden Alexanders	0.30%
	Desmodium canadense	Showy Tick Trefoil	0.30%
	Solidago bicolor	White Goldenrod	0.20%
	Solidago caesia	Woodland Goldenrod	0.20%
	Rudbeckia hirta-VT ecotype	Black-eyed Susan-VT ecotype	0.20%
	Aster novae-angliae	New England Aster	0.20%
	Solidago odora	Licorice Scented Goldenrod	0.20%
	Aster divaricatus	White Wood Aster	0.20%
	Heliopsis helianthoides	Ox-Eye Sunflower	0.20%
	Pycnanthemum tenuifolium	Slender Mountain Mint	0.20%
	Monarda fistulosa	Wild Bergamot	0.10%
	Eupatorium perfoliatum	Boneset	0.10%
	Aster lateriflorus	Calico Aster	0.10%
	Oenothera fruticosa var. fruticosa	Sundrops	0.10%
			6.60%
			100.00%
	<i>Seeding Rate: 15.0 lbs PLS/Acre</i>		

765.453 Woodland Edge Shade Mix			
	<u>Botanical Name</u>	<u>Common Name</u>	<u>% PLS by Weight</u>
Grass	Elymus virginicus	Virginia Wild Rye	35.00%
	Elymus riparius	Riverbank Wild Rye	25.00%
	Panicum clandestinum 'Tioga'	Deer Tongue 'Tioga'	9.00%
	Schizachyrium scoparium 'Albany Pine'	Little Bluestem 'Albany Pine'	5.30%
	Elymus hystrix	Bottlebrush Grass	3.00%
	Agrostis perennans	Upland Bentgrass	2.50%
	Carex vulpinoidea	Fox Sedge	2.00%
	Cinna arundinacea	Sweet Woodreed	2.00%
	Carex scoparia	Broom sedge	0.20%
	Juncus tenuis	Path Rush	0.20%
	Juncus effusus	Soft Rush	0.10%
			84.30%
Herb/Forb	Chamaecrista fasciculata	Partridge Pea	4.00%
	Desmodium canadense	Showy Tick Trefoil	2.00%
	Penstemon digitalis	Beard-tongue	2.00%
	Geum canadense	White Avens	2.00%
	Heliopsis helianthoides	Ox-Eye Sunflower	2.00%
	Zizia aurea	Golden Alexanders	0.80%
	Aster macrophyllus	Bigleaf Aster - PA Ecotype	0.50%
	Anemone virginiana	Thimbleweed	0.50%
	Monarda fistulosa	Wild Bergamot	0.40%
	Aster divaricatus	White Wood Aster	0.30%
	Aster prenanthoides	Zig Zag Aster	0.30%
	Solidago caesia	Woodland Goldenrod	0.20%
	Solidago odora	Licorice Scented Goldenrod	0.20%
	Oenothera fruticosa var. fruticosa	Sundrops	0.20%
	Solidago bicolor	White Goldenrod	0.20%
	Eupatorium fistulosum	Joe Pye Weed	0.10%
			15.70%
			100.00%
Seeding Rate: 15.0 lbs PLS/Acre			

765.472 Steep Slope Mid-Height Mix			
	<u>Botanical Name</u>	<u>Common Name</u>	<u>% PLS by Weight</u>
Grass	Cover Crop - Secale cereale/Avena sativa	Cover Crop - Grain Oats/Rye	40.00%
	Schizachyrium scoparium 'Albany Pine'	Little Bluestem 'Albany Pine'	30.00%
	Elymus virginicus	Virginia Wild Rye	8.00%
	Elymus canadensis	Canada Wild Rye	5.00%
	Panicum virgatum	Switch Grass	4.50%
	Agrostis perennans	Upland Bentgrass	3.00%
	Dichanthelium clandestinum 'Tioga'	Deertongue grass 'Tioga'	2.30%
			92.80%
Herb/Forb	Echinacea purpurea	Purple Coneflower	3.00%
	Chamaecrista fasciculata	Partridge Pea	2.00%
	Penstemon digitalis	Beard-tongue	0.70%
	Monarda fistulosa	Wild Bergamot	0.30%
	Asclepias syriaca	Common Milkweed	0.20%
	Lespedeza capitata	Roundhead Bush Clover	0.20%
	Rudbeckia hirta-VT ecotype	Black-eyed Susan-VT ecotype	0.10%
	Aster prenanthoides	Zig Zag Aster	0.10%
	Solidago nemoralis	Grey Goldenrod	0.10%
	Aster pilosus	Heath Aster	0.10%
	Aster laevis NY Ecotype	Smooth Aster NY Ecotype	0.10%
	Pycnanthemum tenuifolium	Slender Mountain Mint	0.10%
	Solidago juncea	Early Goldenrod	0.10%
	Asclepias incarnata	Swamp Milkweed	0.10%
			7.20%
			100.00%
Seeding Rate: 75.0 lbs PLS/Acre			

765.472 Steep Slope Tall Mix			
	<u>Botanical Name</u>	<u>Common Name</u>	<u>% PLS by Weight</u>
Grass	Cover Crop - Secale cereale/Avena sativa	Cover Crop - Grain Oats/Rye	40.00%
	Andropogon gerardii NY Eco	Big Bluestem NY Eco	20.00%
	Elymus virginicus	Virginia Wild Rye	15.00%
	Schizachyrium scoparium 'Albany Pine'	Little Bluestem 'Albany Pine'	8.00%
	Sorghastrum nutans New England 2 Ecotype	Indiangrass New England 2 Ecotype	7.00%
	Panicum virgatum	Switchgrass	3.50%
	Agrostis perennans	Upland Bentgrass	1.00%
	Panicum clandestinum 'Tioga'	Deer Tongue 'Tioga'	0.80%
			95.30%
Herb/Forb	Chamaecrista fasciculata	Partridge Pea	2.00%
	Echinacea purpurea	Purple Coneflower	1.00%
	Penstemon digitalis	Beard-tongue	0.50%
	Solidago rigida	Rigid Goldenrod	0.10%
	Desmodium canadense	Showy Tick Trefoil	0.10%
	Aster lateriflorus	Calico Aster	0.10%
	Monarda fistulosa	Wild Bergamot	0.10%
	Aster pilosus	Heath Aster	0.10%
	Solidago juncea	Early Goldenrod	0.10%
	Heliopsis helianthoides	Ox-Eye Sunflower	0.10%
	Pycnanthemum tenuifolium	Slender Mountain Mint	0.10%
	Asclepias incarnata	Swamp Milkweed	0.10%
	Lespedeza capitata	Roundhead Bush Clover	0.10%
	Aster laevis NY Ecotype	Smooth Aster NY Ecotype	0.10%
	Asclepias syriaca	Common Milkweed	0.10%
			4.70%
			100.00%
Seeding Rate: 75.0 lbs PLS/Acre			