



Promoting Poaceae

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Ornamental grasses typify the "New American Garden", the term that is used to describe landscapes that resemble meadows full of native plants. This new way of thinking about landscapes is leading us away from regimented European-style borders and towards freer, more democratic forms. Many people credit the landscape architects Wolfgang Oehme and James van Sweden with popularizing this type of planting. In their landscapes, Oehme and Van Sweden seek to capture the spirit of the Great Plains, full of rolling hills and flowing grasses.

Ornamental grasses have increased in popularity due to other factors. They require very little maintenance, are quite drought tolerant, and have very few pests or diseases. Grasses add movement and sound, height and grace to gardens. In addition, there are many new, compact cultivars that can be used in small landscapes and in containers. Grasses are easy to propagate, they can grow in almost any soil and weather, and they need little fertilizer. As an example of the popularity of ornamental grasses, *Calamagrostis x acutiflora* 'Karl Foerster' was chosen as the Perennial Plant Association's Perennial Plant of 2001 for its excellent performance over many years in Zones 4-9.

Grasses were easy to integrate into the upper Mid-West and Great Plains states, and the Mid-Atlantic has also experienced great success with

grasses. The Southwest is interested in grasses because of their drought tolerance. Thanks to new research, the Southeast is now able to buy heat tolerant species that will perform in the high humidity and long, dry summers. Researchers at the University of Florida have been conducting studies to determine the best performers for the Florida Panhandle, focusing on plants grown in full sun and drought-like conditions. Some of their top-rated plants included *Miscanthus sinensis* 'Zebrinus' and 'Arabesque', *Pennisetum alopecuroides*, and *Muhlenbergia capillaris*. Poor performers included *Calamagrostis arundinacea*, *Sesleria autumnalis*, and *Deschampsia caespitosa*. In a study conducted at Texas A&M, researchers found that people preferred purple fountain grass (*Pennisetum*) and Lindheimer's muhly (*Muhlenbergia*) to big bluestem (*Andropogon*). Please refer to our website, as we have links that recommend ornamental grass cultivars for almost every region of the country.

Table 1 focuses on the true grasses (those in the Poaceae family), but there are several other families of plants that are sold as ornamental grasses. These include the rushes (*Juncus*), sedges (*Cyperus* and *Carex*), sweet flag (*Acorus*), and New Zealand flax (*Phormium*).

Several reputable ornamental grass wholesalers have established themselves nationwide. These firms have developed their own marketing programs and provide cultural



Miscanthus are durable plants that bloom in late summer.

Table 1. Selected ornamental grasses.		
Name	Foliage Height	Description and Landscape Uses
<i>Alopecurus pratensis</i> 'Variegatus' (meadow foxtail)	2'	Cool season. Broad gold leaf margins. Good for Northern gardens. Ground cover. Blooms in spring. Cultivars preferred to species. Propagate by division in spring or fall. Zone 4.
<i>Ammophila breviligulata</i> (American beach grass)	2-3'	Native to the East Coast. Warm season. Do not transplant in summer. Salt tolerant. Propagate by division. Zone 5. 'Cape' recommended for Northern gardens, 'Hatteras' for Southern.
<i>Andropogon gerardii</i> (big bluestem)	5 - 8'	Native to the Prairies. Large upright grass. Plant in clumps or among perennials. Russet color in fall. Zone 3.
<i>Arrhenatherum elatius bulbosum</i> 'Variegatum' (bulbous oat grass)	1'	European native. White-striped foliage. Tolerates dry soil. Cool season grass. Species is invasive. Use as an edging or groundcover. Propagate by division. Zone 4.
<i>Arundo donax</i> (giant reed grass)		Flowers persist into winter. Can be invasive. Propagate by division. Zone 6.
'Variegata'	7-12'	Best as a specimen plant. Creamy-white leaves.
<i>Bouteloua</i> (grama grass)		Warm season grass native to the Great Plains. Propagate by division or seed.
<i>gracilis</i> (mosquito grass)	1'	Tolerates dry soil. Zone 3.
<i>curtipendula</i> (side oats grama)	3'	Drought tolerant. Reddish-purple fall color. Best in groupings. Zone 4.
<i>Briza media</i> (quaking grass)	2-3'	European native. Cool season. Good cut flowers. Propagate by division or seed. Zone 4.
<i>Bromus inermis</i> 'Skinners Gold' (brome grass)	3'	Good for Western states. Yellow variegated leaves and flower stalks. Propagate by division. Zone 7.
<i>Calamagrostis brachytricha</i> (feather reed grass)	2'	Native to Asia. Warm season. 3' pink blooms produced in early fall; change to bronze or brown. Great as cut flowers and in containers. Propagate by division or seed. Zone 4-9.
<i>Calamagrostis x acutiflora</i> 'Karl Foerster' (feather reed grass)	3'	PPA Perennial Plant 2001. Cool season, but relatively heat and drought tolerant. Do not transplant during summer. Propagate by division in early fall or very early spring, using 1-2 eyes for each division. Pot up liners into quarts or gallons in late spring and keep temperatures between 55 and 75°F for at least 8 weeks. Blooms in late spring. Zone 4.
<i>Chasmantium latifolium</i> (wild oats)	3-5'	Native to Southeast and Mid-Atlantic. Warm season. Versatile; looks good in many settings. Grows well in shady and sunny areas. Seed clusters are very attractive and turn golden in fall. They can be used in floral arrangements or dried. Propagate by division or seed. Zone 5.
<i>Cortaderia selloana</i> (pampas grass)	8-12'	Native to South America. Good cut flowers. Recommended for the Southeast. Drought tolerant. Propagate in spring only.
'Pumila'	4-6'	Compact and cold-hardy. Zone 6b.
'Silver Comet'	8'	Variegated foliage has white edges and dark purple base. Zones 7b-10.
<i>Deschampsia caespitosa</i> 'Northern Lights' (hair grass)	1'	Cool season. Can grow in sun, part shade, or wet areas. Use singly, in masses, or to edge. Propagate by division. Zone 4.
<i>Eragrostis curvula</i> (weeping love grass)	3'	South African native. Pendulous foliage. Good for erosion control and groundcover. Propagate by seed or division. Zone 7.
<i>Eragrostis spectabilis</i> (purple love grass)	2'	Native to North America. Grows best in sandy or poor soils. Reddish-pink flowers. Drought tolerant. Propagates easily by seed. Zone 5.
<i>Eragrostis trichodes</i> (sand love grass)	4'	Native to the Mid-West. Reddish-pink flowers in summer. Drought tolerant. Propagate by seed or division in spring. Zone 5.
<i>Fargesia nitida</i> (fountain bamboo)	9-14'	Cold-hardy, clump-forming bamboo. Propagate by division in spring and keep new divisions very well watered. Zone 4.
<i>Festuca amethystina</i> 'Superba' (large blue fescue)	18"	European native. Amethyst-colored flower stalks. Zone 4.
<i>Festuca glauca</i> 'Elijah Blue'	1'	European native. Cool season. Blue-green foliage. Can be used like liriope (as a mass planting or to edge beds). Zone 4.
<i>Glyceria maxima</i> 'Variegata' (manna grass)	18"	Creamy yellow foliage. Needs wet soil. Can be aggressive. Good for containers. Propagate by seed or division in spring. Zone 5.
<i>Hakonechloa macra</i> 'Aureola' (Hakone grass)	18"	Native to Japan. Yellow or cream striped foliage. Grow in sun in cool, moist areas of the country, in shade in the South. Good for containers, as groundcovers, and specimen plants. Propagate by division. Zone 6.

Table 1. continued.

Name	Foliage Height	Description and Landscape Uses
<i>Helictotrichon sempervirens</i> (blue oat grass)	2-3'	Native to the Mediterranean. Cool season. Blue foliage. Oat-like blooms that turn golden in summer. Prefers rich, moist soil. Zone 4.
<i>Holcus mollis</i> 'Variegatus' (creeping soft grass)	8-12"	European native. Cool season. White striped foliage. Good groundcover choice. Zone 6.
<i>Hystrix patula</i> (bottlebrush grass)	3'	Native to North America. Prefers some shade; tolerates dry shade. Propagate by seed. Zone 4.
<i>Imperata cylindrica</i> var. <i>koenigii</i> 'Red Baron' (Japanese blood grass)	18"	Asian native. Grown for its bright red foliage. Transplant only in spring. Propagate by division. Zone 6.
<i>Isolepis cernua</i> (fiber optic grass)	1'	Native to Europe. Grows in almost any soil. Excellent in containers. Propagate by division or seed. Zone 9.
<i>Koeleria macrantha</i> (June grass)	1-2'	Native to the Prairies. Cool season. Short lived. Blooms in June, then goes dormant during summer. Propagate by seed or division in spring. Zone 5.
<i>Leymus arenarius</i> (blue lyme grass)	3-4'	European native. Cool season. Blue foliage that combines well with purple and maroon. Drought and salt tolerant. Propagate by division. Can be invasive. Zone 4.
<i>Milium effusum</i> 'Aureum' (Bowles' golden grass)	18"	Native to North America. Cool season. New foliage is bright chartreuse yellow. Blooms late spring-early summer. Propagate by division. Zone 6.
<i>Miscanthus</i> 'Giganteus' (giant miscanthus)	To 10'	Native to Japan. Blooms in late summer. Clump-forming. Propagate by division. Zone 4.
<i>Miscanthus sacchariflorus</i> (silver banner grass)	To 8'	Native to Asia. Warm season. Tolerates wet soil. Blooms in August. Can be invasive.
<i>Miscanthus sinensis</i> (miscanthus or eulalia grass)		Native to Asia. Warm season. Clump-forming. Adaptable to any soil. Need little fertilization. Pests are miscanthus mealybug and miscanthus blight. Propagate by division.
'Adajio'	3-5'	Dwarf selection; narrow leaves that turn reddish in fall; good for small gardens. Zones 6-9.
'Goldfeder' (gold feather)	7'	Yellow variegated foliage. Somewhat difficult to propagate. Zone 6.
'Gracillimus' (maiden grass)	7'	Good for Southern gardens. Dusky red flowers in September. Zone 5.
'Graziella'	7'	Good for Northern gardens. Reddish-orange foliage. Zone 5.
'Hinjo'	To 6'	Variegation pattern like 'Zebrinus' or 'Strictus' but more compact. Zone 5.
'Morning Light'	5-7'	Very fine cv. Reddish flowers. Zone 5.
'Silberfeder' (silver feather)	7'	Silvery flowers in August.
'Strictus' (porcupine grass)	9'	Variegation pattern same as 'Zebrinus', but habit is more upright. Zone 5.
'Variegatus'	5'	Tolerates wet soil. Good for Southern gardens. White striped foliage. Zone 5.
'Zebrinus' (zebra grass)	To 7'	Tolerates wet soil. Good for Southern gardens. Yellow variegated foliage. Zone 5.
<i>Miscanthus sinensis</i> var. <i>condensatus</i> 'Cabaret'	9'	Creamy-white variegated foliage; blooms produced in fall are reddish-purple, fading to tan. Excellent specimen plant. Propagate by division. Zones 6-9.
<i>Miscanthus</i> 'Purpurascens'	5'	Excellent reddish-orange fall color. Not drought tolerant. Propagate by division. Zone 4.
<i>Molinia caerulea</i> 'Variegata' (purple moor grass)	2-3'	Yellow or white variegated foliage. Propagate by division. Zone 5.
<i>Molinia caerulea arundinacea</i> (tall purple moor grass)	2-3'	Native to Europe and Asia. Cool season. Grown for tall (up to 8') flowers. Best suited to Northern gardens. Propagate by seed or division. Zone 4.
<i>Muhlenbergia capillaris</i> (pink muhly)	3'	Native to southern U.S. and Mexico. Blooms are pinkish-red, borne in fall. Drought and heat tolerant. Propagate by seed or division. Zone 6.
<i>Muhlenbergia lindheimeri</i> (Lindheimer's muhly)	3'	Native to Texas and Mexico. Good for Southern gardens. Blue foliage. Very heat and drought tolerant. Upright habit with bronze blooms. Propagate by seed or division. Zones 7-10.
<i>Muhlenbergia rigens</i> (deer grass)	5'	Native to western U.S. and Mexico. Upright foliage. Very drought-tolerant. Propagate by seed or division. Zone 7.

Table 1. continued.

	Name	Foliage Height	Description and Landscape Uses
	<i>Nassella tenuissima</i> (Mexican feather grass)	12-18"	Native to Texas and Mexico. Very fine texture. Very drought tolerant. Propagate by seed. Zone 6.
	<i>Panicum virgatum</i> (blue switch grass)		Native to the Prairies. Warm season.
	'Cloud Nine'	6-8'	Metallic blue foliage; reddish-brown blooms. Zones 4-9.
	'Heavy Metal'	4-5'	Upright blue foliage. Zones 4-9.
	'Prairie Sky'	5-6'	Better for the West and very dry areas. Zones 4-9.
	<i>Pennisetum</i> 'Burgundy Giant' (giant burgundy fountain grass)	6'	Dark purple foliage and blooms. Annual north of Zone 10. Fast grower.
	<i>Pennisetum alopecuroides</i> (fountain grass)	1-5'	Green foliage. Good cut flowers. Cvs. include 'Hameln', 'Little Bunny', and 'National Arboretum'. Zone 6.
	<i>Pennisetum orientale</i> (fountain grass)	1-2'	Native to Asia and India. Long bloom period. Compact; good for containers. Propagate by seed. Zone 6.
	<i>Pennisetum setaceum</i> (tender fountain grass) (purple fountain grass)	2-5'	Clump-forming. Grown as an annual in most of the country. Can be used in containers. Reddish-purple leaves and reddish-pink blooms. Cvs. called by many names, including 'Rubrum', 'Cupreum', 'Atrosaguineum', 'Red Riding Hood', and 'Dwarf Rubrum'. Best propagated by division. Zone 9.
	<i>Pennisetum villosus</i> (feathertop)	2-3'	Native to Africa. Excellent cut flower and in containers. White flowers. Propagate by seed. Zone 7.
	<i>Phalaris arundinacea</i> 'Strawberries and Cream' (aka 'Feesey') (reed canary grass)	2'	Native to North America. Bog plant. Cool season. White and green striped foliage. Can be invasive. Propagate by division. Zone 4.
	<i>Phyllostachys nigra</i> (black bamboo)	To 30'	Native to China and India. Black stems are very attractive. Good container specimen. Can be aggressive in warm areas. Zone 7.
	<i>Pleioblastus auricomus</i> (compact gold-striped bamboo)	3'	Native to China and Japan. Yellow variegated foliage. Extremely aggressive. Propagate by division in spring. Zone 5.
	<i>Saccharum arundinaceum</i> (hardy sugarcane)	10'	Native to India and Asia. Warm season. Blooms look like pink pampas grass. Propagate by seed or division in spring. Zones 6-10.
	<i>Saccharum giganteum</i> (giant plume grass)	10'	Native to North America. Fall colors are dark red to purple. Propagate by division. Zone 6.
	<i>Saccharum officinarum</i> 'Violaceum' (purple-stemmed sugarcane)	8-20'	Warm season. Valued for dark purple stems. Propagate by division. Zone 10.
	<i>Saccharum ravennae</i> (ravenna grass)	To 14'	Mediterranean native. Flower stalks are reddish-orange in fall. Good cut flower. Drought tolerant. Zone 6.
	<i>Schizachyrium scoparium</i> (little bluestem)	2'	Native to the Prairies. Adaptable to any soil. Clump-forming. Orange fall color. Propagate by division in spring. Zone 3.
	<i>Sesleria autumnalis</i> (autumn moor grass)	1-2'	Native to Europe. Blooms in late summer and fall. Propagate by division in spring or fall. Zone 4.
	<i>Sorghastrum nutans</i> (Indian grass)	5-7'	Native to the Prairies. Warm season. Adaptable to any soil. Upright habit. Propagate by seed or division. Zone 4.
	<i>Spartina bakeri</i> (sand cordgrass)	3-4'	Native to the Southeast. Blooms May-June. Tolerates marshy settings and drought. Cannot withstand salt.
	<i>Spartina pectinata</i> 'Aureomarginata' (prairie cordgrass)	To 6'	Native to Northern bogs and marshes. Warm season. Bright yellow variegated foliage. Salt tolerant. Propagate by seed or division. Zone 4.
	<i>Spodiopogon sibiricus</i> (Siberian graybeard)	3'	Native to Asia. Clump-forming. Upright habit. Dark red fall color. Better for Northern gardens. Can grow in shade. Propagate by seed or division in spring. Zone 4.
	<i>Sporobolus heterolepis</i> (prairie dropseed)	18"	Native to the Prairies. Warm season. Excellent orange and russet fall color. Adaptable to any soil. Fragrant flowers. Propagate by seed. Zone 4.
	<i>Stipa gigantea</i> (giant feather grass)	2' (foliage to 8')	Native to the Mediterranean. Propagate by seed. Does not tolerate wet conditions. Better for cool, moist areas of the country. Zone 6.
	<i>Tripsacum dactyloides</i> (Eastern gama grass)	8'	Bog plant native to North America. Unusual pink and green flowers. Propagate by seed or division. Zone 5.
	<i>Uniola paniculata</i> (sea oats)	4'	Native to sand dunes of North America. Interesting oat-like seed. Very salt tolerant. Zone 8.

information to grower-retailers. Refer to our website for a list of ornamental grass suppliers.

Propagation

Cool season grasses grow in spring and fall. Since they are dormant in summer, transplanting or dividing is not recommended at this time of year. In the landscape, cool season grasses often require more division and are not as drought tolerant as warm season grasses. Warm season grasses really put on growth in summer.

Grasses can also be divided between clump forming and rhizome (or stolon) forming. Clump forming grasses do just that. They are not invasive and grow by increasing their circumference every year, so the centers may begin to die out. Rhizome forming grasses are often called running grasses, and they can be invasive.

Division is the best way to propagate ornamental grasses. The best time to divide grasses is in the late fall or winter, after they are fully dormant. Each division should have at least three stems (culms). Divisions can be grown in cell packs or pots, but grasses grown in small containers can dry out very quickly. Divisions and liners, especially of large or aggressive grasses such as *Miscanthus* and *Panicum*, can also be potted direct to final containers (1 or 2 gallon pots). Incorporate a 6-month controlled-release fertilizer into the potting medium at planting. Late summer growth can cause potted grasses to become top-heavy. Consider Bonzi media drenches at rates of 1 and 2 ppm, as these have been shown to be effective at controlling the height of potted pampas grass. Although the production for most ornamental grasses is much longer than for annuals, vigorous grasses will develop into large, marketable plants after only 12 weeks of growth.

Marketing

The key to creating grass sales is to offer only those plants that grow well in your region. Many consumers in the North were turned off when the big box stores sold purple fountain grass as a perennial rather than an annual. Almost every state has information on the adaptability of ornamental grasses for that region. Refer to our website for a list of links to regional recommendations.

So many people are looking for low-maintenance plants and landscapes that it's amazing that ornamental

grasses aren't overused. Promotion of grasses as durable, pest-resistant, low-water and drought-tolerant plants will be enough to sell anybody.

Retailers who are afraid that grasses won't sell because "they don't have any color" should look at purple fountain grass (*Pennisetum*), zebra grass (*Miscanthus*), and blooming muhly grass (*Muhlenbergia*). In the landscape, grasses look best when combined with other perennials. Mixing grasses into the perennials sales area will allow customers to see how well these two go together. Pay attention to color here: mix silvery blue grass foliage with white, blue and purple flowering perennials and annuals. In the heat of summer, nothing looks cooler than white, and a large variegated *Arundo donax* makes a powerful statement. Grasses also offer a soft, graceful form that is not common among annuals.

Rather than promoting the compact grasses as groundcovers, offer them as plants to control erosion. Weeping love grass (*Eragrostis*) is extremely effective and is often planted at new highway sites in the South for this purpose. The John Greenlee Collection of ornamental grasses, offered by Euro-American Propagators, focuses on compact species and cultivars grown especially for pot culture.

The big sales period is late summer and fall, when established grasses are blooming in the landscape. Unfortunately, potted grasses can look straggly during this time of year. How can a grower overcome this limitation? Use ornamental grasses in the display garden, and have excellent photos of the whole grass, inflorescence and all, so that the mature form can be seen.

Ornamental grasses will continue to increase in popularity. They are the herbaceous giants of the summer border. Coarse or fine, ornamental grasses offer texture to the heat-stricken annual bed and soften containers. Customers have begun to appreciate the versatility of grasses in their gardens and will continue to expand their collections. Be ready.

Additional information and photographs can be viewed at the North Carolina State University website, listed under the Retail Reflections icon: www.floricultureinfo.com

