Cool Season, Native Ornamental Grasses for the Home Garden

Native ornamental grasses provide valuable wildlife habitat, shelter and food for insects and larval caterpillars.

Spring Up! Cool-season ornamental grasses boldly announce the early gardening season, bursting forth with substantial foliage and showing interesting habits, textures, and varied leaf hues. Later in the spring, these grasses begin to flower, offering charming inflorescences. Their eye-catching displays and movement extend into the late season, as colors and forms mature and showy seed heads appear, offering an ornamental spectacle throughout much of the year. And like all native plants, they support biodiversity and garden ecosystems, helping native wildlife thrive.

Ornamental Grass Basics

While there are other grass-like ornamental plants, such as sedges belonging to the genus Carex in the Cyperaceae, along with rushes in the Juncaceae, these are not considered true grasses. True grasses are members of the Poaceae. They have cylindrical hollow stems and solid swollen nodes on the culm, the part of the plant also known as a jointed stem. Sedges, however, have triangular-shaped solid stems with three edges and no nodes. Rushes have a rounded, solid culm without joints.

True grasses can be either cool-season or warm-season perennial plants. Cool-season grasses emerge when temperatures are between 60-75 o F. After flowering in early summer further growth stalls. Their established ornamental features mature late into the season. In contrast, warm-season grasses break dormancy at higher outdoor temperatures and don’t flower until mid to late summer, or even into early fall.
The flowers of ornamental grasses do not have petals, sepals, or nectar. A single flower is called a floret, consisting of both stamen and pistil, which are enclosed by bracts, small scales called lemma or palea. An assemblage of more than one floret is called a spikelet. Its bracts are known as glumes and are sometimes tipped with long, hairy-like, bristly extensions referred to as awns.

Spikelets, or grass florets, are held atop the terminal end of the central culm, or main stem. The spikelets are arranged in patterns called an inflorescence. The most common inflorescence types are either spike, raceme, or panicle, each with varying degrees of branching off of its own stem, named a rachis. A panicle usually has the longest, widest branching, while a raceme’s inflorescence is much shorter. The grass’s culm has no branches, but is sheathed with leaf blades which extend outward, forming the plants foliage. Most often, the foliage is tufted, mounded or upright.
Grass plants spread by rhizomes or stolons, or they grow as a discrete clump that forms a crown, inhabiting its planting area. New growth of perennial grasses emerge with new shoots or tillers. Grasses are often wind pollinated, their spikelets developing into seeds or grains later in the season.
Benefits of Cool Season, Native Ornamental Grasses

The cool-season ornamental grasses included in Tables 1 and 2 are grown in both public gardens and home gardens. Table 1 lists tall mature-height grasses, while Table 2 lists those of medium mature height. For each group, there are highlights of ornamental features and growing considerations. Ornamental features may vary depending on plant maturity and growing conditions. Regardless of height, they all share the same basic grass parts: floret (flower), culm (stem), and foliage. Each part adds unique ornamental features to a grass’s overall appearance.
You will find that every cool-season grass has distinctly different and unique ornamental features, offering home gardeners many options to enhance their home garden or pursue new garden styles.

Specifically, the garden benefits of cool-season ornamental grasses include:

- early spring foliage with flowering by early summer
- naturalistic, simple, soft styling
- movement and sound
- maturing, long-lasting forms and colors, well into fall
- sequencing with later, warm season ornamental grasses
- companion intermingling with the petal flowers and foliage of summer plants

According to the USDA, the cool-season grasses listed in the table are native to the lower 48 United States. All are native to Pennsylvania, except for *Diarrhena americana, Festuca idahoensis, and Nassella tenuissima*. Although these three are not Pennsylvania natives they are well suited for Pennsylvania home gardens based on their USDA Plant Hardiness Zones, growing considerations, and current use in public and home gardens.
<table>
<thead>
<tr>
<th>Grass (common name)</th>
<th>Ornamental Feature Highlights (may vary by plant maturity and growing conditions)</th>
<th>Growing Considerations</th>
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</thead>
</table>
| Chasmanthium latifolium  
(Northern/woodland sea oats) | **Flower:** Drooping panicles of large flat oat-like spikelets - light green - on thin, arching stalks. Dangling spikelets dance in a breeze. Mature seedheads show shades of bronze and/or buff; popular for dried floral arrangements. **Foliage:** Upright, densely textured, shiny green foliage; long (up to 8-10 inches) and lance-like. Colors mature to golden, coppery, and tan. | Prefers part sun/part shade, Rhizomatous clump growing perennial, Self-seeds, USDA hardiness zones 3-8 |
| Elymus hystrix  
(syn. Hystrix patula)  
(Eastern bottlebrush) | **Flower:** Erect, long raceme (up to 8 inches) of whitish/grayish green bilateral spikelets of widely-spaced long bristly awns (up to 2 inches). Raceme resembles a showy cylindrical bottle brush; maturing later to brown/tan. **Foliage:** Loose, lanky green leaves. | Prefers part sun/part shade, Clump growing perennial, Self-seeds, USDA hardiness zones 3-8 |
| Deschampsia cespitosa 'Goldtau'  
(gold dew tufted hairgrass) | **Flower:** Erect to nodding long (up to 20 inches); panicle, wide and loosely branched; tiny, light chartreuse-yellow spikelet florets, with awns. In mass, panicles show as a floating, soft airy cloud. **Foliage:** Dense mounding tussock of arching dark green foliage; leaves are flat/rolled, narrow and long. | Prefers part sun/part shade, Shade tolerant, Clump growing perennial, Semi-evergreen foliage, USDA hardiness zones 4-9 |

Table 1. Cool-Season, Native Ornamental Grasses (Poaceae) for the Home Garden. Tall Mature Height (up to 4-6 feet) Based on Foliage, Culm, and Flower Inflorescence.
<table>
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<th>Grass (common name)</th>
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<tr>
<td><strong>Deschampsia flexuosa</strong> (wavy or crinkled hairgrass)</td>
<td><strong>Flower:</strong> Wide, loose panicle hovers above slender, wiry culms, like a feathery wand. Panicle of tiny spikelets tinged silver or purple to bronze; awns are twisted, bent. Florets mature to gold color. In mass, panicles create a cloud-like show. <strong>Foliage:</strong> Low, dense tussock of arching, threadlike, dark green/blue-green leaves.</td>
<td>Prefers part shade or shade, Prefers dry soil, Clump growing perennial, USDA hardiness zone 4-7</td>
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<tr>
<td><strong>Diarrhena americana</strong> (American beak grain)</td>
<td><strong>Flower:</strong> Drooping panicle of florets. In late season, distinctive large seed head (4-6 mm), a hard, brown grain resembling a long beak with blunt tip. <strong>Foliage:</strong> Erect to arching bright green leaves, turning golden to tan in late season</td>
<td>Part shade to shade, Prefers moist soils, Rhizomatous perennial, USDA hardiness zone 4-8, Native: mid to southern Atlantic United States</td>
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<tr>
<td><strong>Festuca idahoensis 'Siskiyou Blue’ hybrid</strong> (Idaho blue fescue)</td>
<td><strong>Flower:</strong> Dense panicle of creamy spikelets; narrow branching with awns. Matures to amber-tan. <strong>Foliage:</strong> Dense basal tuft of narrow, threadlike leaves, slate/chalky/spruce blue in color.</td>
<td>Full sun to part shade, Prefers well-drained soil, Clump growing perennial, USDA hardiness zone 4-10, Native species: mid to western United States</td>
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<tr>
<td><strong>Koeleria macrantha</strong> (prairie junegrass)</td>
<td><strong>Flower:</strong> stout, large panicle of spikelets, which fluff open. Spikelet varies in lustrous colors of light green to silver-green or purplish; matures to tan/brown. <strong>Foliage:</strong> compact tuft of narrow, pointed tip leaves; medium green to tinged blue-green or gray-green. Matures to light-gray or straw color.</td>
<td>Full sun, Prefers well-drained, dry soil, Clump growing perennial, USDA hardiness zone 3-9</td>
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<tr>
<td><strong>Nassella tenuissima</strong> (finestem needle grass)</td>
<td><strong>Flower:</strong> Upright to gently arching panicles of small, silvery yellow or creamy spikelets. Thin, bristly seed head resembles a feather. <strong>Foliage:</strong> Very fine, wispy light green leaves; matures to light brown. Graceful sway in a light breeze</td>
<td>Full sun to part shade, Prefers well-drained soil, Clump growing perennial, USDA hardiness zone 6-10, Native: southwestern United States</td>
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Table 2. Cool-Season, Native Ornamental Grasses (Poaceae) for the Home Garden. Medium Mature Height (up to 2-3 feet) Based on Foliage, Culm, and Flower Inflorescence

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