

## A Few Common Native Grasses of North Carolina<sup>a</sup>

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These notes are for gardeners trying to include more native grasses in home and community landscapes (suggestions welcome). N's ABG class resources <https://tinyurl.com/SE-Pollinators>. N&G's resources <https://tinyurl.com/GrasslandsCullowhee>. Grasses are vital components of natural communities. They provide habitat for a huge diversity of insects, spiders, and other wildlife. Many are host plants for butterflies & grass skippers; their pollen and/or foliage is eaten by many other insects. They are key for natural fires (helping to carry fire quickly and replenish soil nutrients). When searching for specific host needs, often non-native grasses are listed for our native butterflies; if you observe caterpillars on native grasses, please document: post to [iNaturalist.org](https://www.naturalist.org), share with me or CarolinaLeps <https://lists.duke.edu/sympa/arc/carolinaleps>.

names	soil <sup>b</sup>	ht.(ft.)	notes
<b>Anatherum glomeratum</b> bushy bluestem	mw	2-3	Mountains to coast, "bushy" seedheads beautiful in light or dew. I always think of the Tasmanian devil when I see these—a heftiness that seems ready to twirl and take off. (Was <i>Andropogon glomeratus</i> .)
<b>Anatherum ternarium</b> splitbeard bluestem	d	2-3	Primarily piedmont & coastal plain. Favorite small stature species—parts of white, fluffy seedheads persist in winter, brilliant in evening sun. (Was <i>Andropogon ternarius</i> .)
<b>Anatherum virginicum</b> broomsedge	dm	2-3	See Weakley for varieties. Many folks know as indicator of acidic soils. Lovely reddish orange fall color, excellent for habitat restoration; less valuable as cattle forage than little bluestem. (Was <i>Andropogon virginicus</i> .)
<b>Andropogon gerardi</b> big bluestem, turkeyfoot	dm	3-7	Bright red and blue tones in stalks, reddish seedheads & fall color. Good for ground nesting birds & bees. (Was <i>A. gerardii</i> .)
<b>Aristida spp.</b> wire or three-awn grass	d	1-2	Easy to recognize most due to 3-awned seedheads, diminutive, some much showier than others. Another common name is arrowfeather, for <i>A. purpurescens</i> .
<b>Aristida stricta</b> Carolina wiregrass	dmw	1-2	Keystone species for longleaf pine. 3-awns less noticeable than some <i>Aristidas</i> . Long leaf blades make it much denser and showier than many <i>Aristidas</i> .
<b>Arundinaria appalachiana</b> hill cane	dm	2-3	Native bamboo, upland species separated from <i>A. gigantea</i> in 2006. This is much shorter than river cane, and more common in the mountains.
<b>Arundinaria gigantea</b> river or giant cane	mw	5-20	Native bamboo, impo. riparian species and for Native Americans, incl. Cherokees, who use it for basket-weaving, among other uses. Excellent for solitary bee houses.
<b>Avenella flexuosa<sup>c</sup></b> wavy hairgrass	dm	1-3	This is one of the most beautiful clump-forming grasses due to its fine foliage and airy seedheads. (Was <i>Deschampsia</i> .)
<b>Chasmanthium latifolium<sup>c</sup></b> river oats	dm	2-3	A great filler with showy seedheads, bright green foliage, that can spread when very happy, seeds used in dried flower arrangements, naturally found in shady riparian areas, tolerates sunnier drier sites but may dry out. (Was <i>Uniola</i> .)
<b>Chasmanthium laxum<sup>c</sup></b> slender wood oats	dm	1-3	Less well-known cousin of river oats, whose seedheads are more reminiscent of a slender woodland sedge. In shade clumps are small; in sun develops a much fuller, showier clump. (Was <i>Uniola</i> .)
<b>Coleataenia anceps<sup>c</sup></b> beaked panic grass	dmw	2-4	One-sided spikelets on panicles w/falcate florets (sickle-shaped tips) make it easy to recognize. Tolerates moisture. Good for restoration. (Was <i>Panicum</i> .)
<b>Danthonia compressa<sup>c</sup></b> mountain oatgrass	dm	1-3	Main grass of grassy balds. Oatgrasses have narrow foliage and distinctive seedheads (2 lemmas flank variable awn)--easy to recognize once learned.
<b>Danthonia sericea<sup>c</sup></b> silky oatgrass	d	1-3	Coastal plain (scattered piedmont, rare mountains), the silky (hairy) cousin of mountain and poverty oatgrass.
<b>Danthonia spicata<sup>c</sup></b> poverty oatgrass	dm	<1 <sup>d</sup>	Aka moonshine grass! This is also a favorite due to its curly basal foliage, diminutive stature, tolerance of full sun or partial shade, and dry to average soil moisture.
<b>Deschampsia cespitosa<sup>ac</sup></b> tufted hairgrass	dm	2-4	Circumboreal cool season at edge of range in S'n Apps (imperiled). Though avail. commercially, best to use <i>Avenella</i> instead, unless living in natural range. Beautiful clumping narrow-leaved basal foliage and large airy seedheads. (Was <i>D. caespitosa</i> .)
<b>Dichanthelium spp.<sup>(c)</sup></b> deertongue, witchgrass	Dmw	6"-4'	Warm and cool season "panic" grasses; nearly 60 spp. Sweet overwintering rosettes separate them from <i>Panicum</i> . Excellent for wildlife; deserve more hort. use.
<b>Elymus hystrix<sup>c</sup></b> bottlebrush grass	dmw	1-4	Many <i>Elymus</i> species look similar (rye-like), all cool season, but bottlebrush is more ornamental: seedhead more open and esp. lovely. Should be used more in gardens.
<b>Elymus virginicus<sup>c</sup></b> Virginia wild rye	mw	1-5	Despite diverse <i>Elymus</i> , only bottlebrush, Virginia and Canada available commercially here. Excellent for restoration (wildlife habitat) and as nurse crops.
<b>Eragrostis spectabilis</b> purple lovegrass	dm	2-4	Favorite of every schoolgirl I have talked with about grasses. Beautiful large airy seedheads create a haze of purple and when covered in dew are spectacular.

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<b><i>Erianthus alopecuroides</i></b> silver plumegrass	dm	6-12	<i>Erianthus</i> , aka <i>Saccharum</i> . Tall with showy, large, fluffy seedheads that start out with a waxy sheen. Silver grows in more upland sites and has gorgeous light-colored seedheads that set it apart from equally wonderful soft brown of the others. All disperse seeds by mid-winter, leaving tall stalks that can be used to make mason and leafcutter bee homes. Broadly distributed. Two others less
<b><i>Erianthus contortus</i></b> bent-awn plumegrass	dmw	6-12	common: brown ( <i>E. coarctatus</i> ) in coastal plain (and piedmont in NC) and short-bearded ( <i>E. brevibarbis</i> ) south and west. Would love to see natives replace non-natives at garden centers.
<b><i>Erianthus giganteus</i></b> sugarcane plumegrass	mw	6-12	
<b><i>Festuca rubra</i><sup>c</sup></b> red fescue	dm	1-2	Beautiful fine-leaved tufted grass that has been cultivated and sold as a shade tolerant turfgrass, classified as native and non-native.
<b><i>Greeneochloa coarctata</i></b> Nuttall's reedgrass	mw	2-5	Found in wetter areas. Showy light, narrow seedheads and stature warrant testing in drier sites. Used for restoration in more northerly regions. (Was <i>Calamagrostis</i> .)
<b><i>Hordeum pusillum</i></b> little barley	dm	¾-1 ½	Our native barley(!) with same long awns of cultivated (non-native) ( <i>H. vulgare</i> ). May be overlooked if not recognized as native. Deserves research as native cover crop!
<b><i>Melica nutica</i><sup>c</sup></b> melicgrass	d	1-2	Another cool-season woodland grass, easy to recognize when in flower and seed—flowers and seeds dangle off one side of long stalks, resembling a leaning sideoats gramma, but in a woodland setting.
<b><i>Muhlenbergia capillaris</i></b> red, pink, purple muhly	dm	2-4	Commonly planted for ornamental beauty; broad southeast distribution. Summer mounds of fine foliage topped w/beautiful, large, airy, reddish seedheads in fall.
<b><i>Muhlenbergia expansa</i></b> savanna grass	mw	1-3	Vital in coastal plain longleaf savanna providing food and shelter for wildlife, for carrying fire quickly through understory with lightning strike or prescribed burn. Another beautiful airy seedhead (without the reddish tones of <i>M. capillaris</i> ).
<b><i>Panicum spp.</i></b> Panic grass, witch grass	dmw	1-3	Panicles are open Christmas-tree-like seedheads. <i>Panicum</i> seeds are somewhat large, firm, and round. Distinguished from <i>Dichanthelium</i> because they do not have over-wintering rosettes. Some are introduced agric. weeds, some biofuel source.
<b><i>Panicum virgatum</i></b> switchgrass	dmw	2-7	Switchgrass is the most commonly recommended substitute for invasive <i>Miscanthus sinensis</i> since it tends to stay upright through the winter and there is a huge diversity of cultivars that can fit particular height or color desires.
<b><i>Paspalum floridanum</i></b> Florida paspalum	dm	3-5	Easy to ID from the single row of round flat seeds, some with blueish leaves, very beautiful but rarely seen in ornamental plantings, definitely worth trying. Note: one common non-native invasive is dallisgrass ( <i>P. dilatatum</i> ).
<b><i>Piptochaetium avenaceum</i><sup>c</sup></b> needle grass	d	<1d	Formerly <i>Stipa</i> , beautiful seeds when seen under hand lens. Another woodland favorite, usu. abundant when present, long needle-like seeds on insubstantial clumps, beautiful <i>en masse</i> , definitely worth trying. Wet seeds spin/drill into soil.
<b><i>Schizachyrium scoparium</i></b> little bluestem	d	1-4	Wonderful in restoration, at home, or for livestock. Many cultivars promise more blue or red. They're all beautiful but can flop in overly rich soil. (Was <i>Andropogon</i> .)
<b><i>Sorghastrum nutans</i></b> Indian grass	dm	3-6	Yellow flowers amidst soft light brown seedheads so beautiful in afternoon light are very common, yet rarely seen in home gardens. Blueish foliage and a very stiff squared off ligule can help with recognition pre-flower.
<b><i>Sporobolus</i><sup>a</sup> spp.</b> dropseed	dm	1-4	These are rare or uncommon in our natural communities, but <i>S. heterolepis</i> (prairie dropseed) is common in ornamental planting due to its billowing fine foliage. <i>S. clandestinus</i> and <i>S. vaginiflorus</i> less showy but more appropriate for our region.
<b><i>Tridens flavus</i></b> purpletop, redbop	dm	3-4	Aka greasy grass for waxy feel of seedhead when fresh. Very common, wispy, tall, creates lovely purple haze hard to find close-up. Also good for restoration.
<b><i>Tripsacum dactyloides</i></b> eastern gamagrass	dm	4-7	Big clump-forming, male flowers with long orange stamens stack above female flowers with purple fuzzy stigmas on spikes that remind me of teeth. In fall these long spikes stretch out to place the heavy seed far from mama.

<sup>a</sup>Some uncommon, but used horticulturally. For natural distribution, see [BONAP.org](https://bonap.org) or refer to Weakley; for rarity see [NatureServe.org](https://natureserve.org).

<sup>b</sup>Grow in dry (d), moist (m), and/or wet (w) soils.

<sup>c</sup>Cool season grasses tolerate cooler temperatures, bloom early in spring, set seed in early summer. Others (w/o "c") are warm season (WS) grasses. WS use a different metabolic pathway that conserves water in the heat of summer. WS start growing later in spring, bloom in summer, and set seed in summer to fall. Warm season may take more than one year to mature (begin flowering).

<sup>d</sup>Seed stalks grow 1-2' but are present for only a short time and relatively insubstantial.

**NOTE:** Weakley's *Flora of the Southeastern United States* and *FloraQuest* at <https://fsus.ncbg.unc.edu/request-flora-pdf.php>.