

A Few Common Native Grasses of North Carolina^a

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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 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, share with me or CarolinaLeps <https://lists.duke.edu/sympa/arc/carolinaleps>. ❖These notes are for gardeners trying to include more native grasses in home and community landscapes (first draft--comments/suggestions welcome).

names	soil ^b	ht. (ft.)	notes
<i>Andropogon gerardii</i> big bluestem, turkeyfoot	dm	3-7	bright red and blue tones in stalks, reddish seedheads & fall color, good for groundnesting birds & bees
<i>Andropogon glomeratus</i> bushy bluestem	mw	2-3	mountains to coast, "bushy" seedheads beautiful in light or dew, for some reason I always think of the Tasmanian devil when I see these, a heftiness that seems ready to twirl and take off
<i>Andropogon ternarius</i> splitbeard bluestem	d	2-3	primarily piedmont & coastal plain, my favorite small stature species—parts of the white, fluffy seedheads persist through the winter, brilliant in evening sun
<i>Andropogon virginicus</i> 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, though less valuable as cattle forage than little bluestem
<i>Aristida</i> spp. wire or three-awn grass	d	1-2	aka arrowfeather, easy to recognize many due to 3-awned seedheads, diminutive, some much showier than others
<i>Aristida stricta</i> wiregrass	dmw	1-2	keystone species for longleaf pine, seedheads stacked on a long narrow stem make the 3-awn aspect less noticeable, and long leafblades make it a much denser, showier form than many other <i>Aristidas</i>
<i>Arundinaria appalachiana</i> hill cane	dm	2-3	native bamboo, upland species separated from <i>A. tecta</i> in 2006, this is much shorter than river cane, and more common in the mountains
<i>Arundinaria gigantea</i> river or giant cane	mw	5-20	native bamboo, important riparian species and for Native Americans who use it for basket-weaving, among other uses (esp. in Mississippi Delta region), excellent for solitary bee houses
<i>Avenella flexuosa</i>^c wavy hairgrass	dm	<1	formerly <i>Deschampsia</i> , this is one of the most beautiful clump-forming grasses due to its fine foliage and airy seedheads
<i>Calamagrostis</i>^c spp. reed grass, bluejoint	mw	2-5	found in wetter areas, this is a very showy medium stature grass that warrants testing in slightly drier sites, and is used for restoration in more northerly regions, the seedheads are light colored and relatively long and narrow
<i>Chasmanthium latifolium</i>^c river oats	dm	2-3	formerly <i>Uniola</i> , a great filler grass 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
<i>Chasmanthium laxum</i>^c slender wood oats	dm	1-3	formerly <i>Uniola</i> , less well-known cousin of river oats whose seedheads are more reminiscent of a slender woodland sedge than river oats, in the woods clumps are small but in sunnier places develops a much fuller clump that can be very showy
<i>Coleataenia anceps</i> beaked panic grass	dm	2-4	formerly <i>Panicum</i> , slightly flattened seeds in the panicles make it easy to distinguish from true <i>Panicum</i> , usually grows in wetter spots, tolerates dry, good for restoration
<i>Danthonia compressa</i>^c mountain oatgrass	dm	1-3	main grass of grassy balds, so easy to recognize once you learn it, narrow foliage and distinctive seedheads (similar to other oatgrasses), size of all oatgrasses make good garden components
<i>Danthonia sericea</i>^c silky oatgrass	d	1-3	coastal plain (scattered piedmont, rare mountains), the silky (hairy) cousin of mountain and poverty oatgrass
<i>Danthonia spicata</i>^c poverty oatgrass	dm	<1 ^d	aka moonshine grass! this is also one of my favorites due to its curly foliage, diminutive stature, tolerance of full sun or full shade
<i>Deschampsia cespitosa</i>^{ac} tufted hairgrass	dm	<1	aka <i>D. caespitosa</i> , more common to the north, one of the most beautiful grasses, fine foliage with beautiful seedheads, but hesitate to promote outside its natural range
<i>Dichantherium</i> spp. deertongue, rosette grass	dmw	1-4	overwintering rosettes distinguish these from <i>Panicum</i> (both <i>Panicum</i> in past), very diverse group, but most common is deertongue (stiff hairs on leaves that are somewhat tongue-shaped), versatile short stature, relatively inexpensive seed
<i>Elymus hystrix</i>^c bottlebrush grass	dm	2-4	formerly <i>Hystrix patula</i> , another favorite found naturally in the shade but does fine in sun, though the leaves may dry in summer, wonderful bottlebrush-like open seedheads with long, slender seeds ripening in early summer, bright green in spring

<i>Elymus virginicus</i>^c Virginia wild rye	mw	1-5	there are many species of <i>Elymus</i> that look similar (rye-like), all cool season as well, excellent for restoration (wildlife habitat) & could be used more in gardens
<i>Eragrostis spectabilis</i> purple love grass	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
<i>Festuca rubra</i>^c red fescue	dm	1-2	beautiful fine-leaved tufted grass that has been cultivated and sold as a shade tolerant turfgrass
<i>Hordeum pusillum</i> little barley	dm	¾-1 ½	our native barley(!) with the same long awns of cultivated (non-native) barley (<i>Hordeum vulgare</i>), may be accidentally overlooked when wrongly presumed to be non-native, deserves research as a local crop!
<i>Melica nutica</i>^c 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 sideoats gramma
<i>Muhlenbergia capillaris</i> red, pink or purple muhly	dm	2-4	maybe the most commonly used native in ornamental plantings, broadly distributed in the southeast, summer mounds of fine foliage are topped with beautiful, large, airy, reddish seedheads in fall
<i>Muhlenbergia expansa</i> savanna grass	mw	1-3	vital in coastal plain longleaf savanna providing food and shelter for wildlife, and also carrying fire quickly through the understory when lightning or prescribed burns bring fire to the community, another beautiful airy seedhead without reddish tones
<i>Panicum spp.</i> panic or witch grass	dmw	1-3	panicles (open Christmas-tree-like) with somewhat large, firm, roundish seeds, distinguished from <i>Dichantheium</i> because they do not have over-wintering rosettes, some introduced weeds in agriculture, some used in biofuel production
<i>Panicum virgatum</i> switch grass	dmw	2-7	switch grass is the most commonly recommended substitute for the invasive <i>Miscanthus sinensis</i> since it tends to stay upright through the winter and there are a huge diversity of cultivars that can fit particular height or color desires
<i>Paspalum floridanum</i> 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 is dallis grass (<i>P. dilatatum</i>)
<i>Piptochaetium avenaceum</i>^c needle grass	d	<1 ^d	formerly <i>Stipa</i> , this is a seedhead you need to look at with a good handlens, another woodland favorite, these are usually abundant when present, with long needle-like seeds on insubstantial clumps but beautiful en masse, definitely worth a try at home
<i>Saccharum alopecuroides</i> silver plumegrass	dm	6-12	<i>Saccharum</i> has been <i>Erianthus</i> in past. All are tall with showy, large, fluffy seedheads that start out with a waxy sheen. Silver and brown plumegrass grow in more upland sites than compressed and sugarcane. Silver takes its name from
<i>Saccharum brevibarbe</i> var. contortum brown plumegrass	dm	6-12	gorgeous light-colored seedheads that set it apart from the wonderful soft brown seedheads of the others. All disperse their seed by mid-winter, leaving tall stalks that can be used to make mason and leafcutter bee homes. <i>E. contortus</i> is restricted to the coastal plain, while the others are more broadly distributed. Try keying these with a few fluffy seed using Weakley's flora. Many non-native <i>Erianthus</i> are sold at garden centers, so it would be wonderful to see some of our native <i>Saccharums</i> taking their place in nurseries and cultivated landscapes.
<i>Saccharum coarctatum</i> compressed plumegrass	mw	6-12	
<i>Saccharum giganteum</i> sugarcane plumegrass	mw	6-12	
<i>Schizachyrium scoparium</i> little bluestem	d	1-4	wonderful in restoration, at home, or for livestock, available in a number of cultivars that promise more blue or red, they're all beautiful but can flop in too rich a site
<i>Sorghastrum nutans</i> Indian grass	dm	3-6	the 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
<i>Sporobolus</i>^a spp. 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
<i>Tridens flavus</i> purpletop	dm	3-4	aka grease grass for the waxy feel of the seedhead when fresh, very common, wispy and tall creating a lovely purple haze that is hard to find close-up, also good for restoration
<i>Tripsacum dactyloides</i> 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

^aSome uncommon, but used horticulturally. For natural distribution, visit BONAP.org; for rarity visit natureserve.org.

^bGrow in dry (d), moist (m), and/or wet (w) soils.

^cCool season grasses tolerate cooler temperatures, bloom early in spring, setting 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).

^dSeed stalks grow 1-2' but are present for only a short time and relatively insubstantial.