

Chapel Hill/Carrboro Soil Stabilization Mix

Johnny Randall, North Carolina Botanical Garden

This seed mix is designed for the Chapel Hill/Carrboro area in general and can be used along the banks and floodplains of local streams. Note that sites vary from place to place and contain a variety of habitats that require different seed mixes. For example, creek banks are generally dry, but do have a moisture gradient from the top to the slope to the creek edge. And the floodplain areas are often more moist, particularly where swales occur.

Use a mixture of at least 4 to 7 different plant species, mixing grasses and forbs, for best results. A combination of the plants listed below should provide the range of species necessary for successful soil stabilization. A quick-germinating native, Virginia wild rye (*Elymus virginicus*), will rapidly stabilize the site, and can be planted in conjunction with other natives that are slower to germinate.

DO NOT plant *Lespedeza cuneata* (sericea lespedeza) or any other non-native *Lespedeza* species, and do not plant non-native fescue. These non-natives might be excellent at soil stabilization, but they persist and out-compete natives, and have a negative effect on wildlife.

Plant species recommendations. Most if not all of these are locally available from Mellow Marsh Farm (www.mellowmarshfarm.com) or Ernst Conservation Seeds (www.ernstseed.com).

Grasses:

- *Dicanthelium clandestinum* – deer tongue
- *Sorgastrum nutans* – Indiangrass
- *Agrostis stolonifera* – creeping bentgrass
- *Chasmanthium latifolium* - river oats
- *Schizachyrium scoparium* – little bluestem
- *Tripsacum dactyloides* – gamma grass
- *Panicum anceps* (= *Coleataenia anceps*) – beaked panic grass

Forbs:

- *Rudbeckia hirta* – black-eyed susan
- *Desmodium canadense* – showy tick trefoil
- *Coreopsis lanceolata* – Lance-leaf tickseed
- *Chamaecrista fasciculata* – Partridge pea
- *Bidens aristosa* – Begger ticks
- *Vernonia novboracensis* – ironweed
- *Helianthus angustifolius* – narrow-leaved sunflower

Sowing rates are not provided, but a rule of thumb is to plant approximately 20-25 lbs/acre that includes 15% Virginia wild rye in order to facilitate rapid stabilization.