

SC Water Ways

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An Introduction to Native Plants for SC Landscapes

Kimberly Counts Morganello and Cathy Reas Foster,
Water Resources Extension Agents, Clemson Extension

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Native plants have evolved in place over time; therefore, these plants tend to be hardy and well-adapted in the residential or commercial landscape. In many cases, established native plants can grow with little to no fertilizer and pesticides, and may require little to no irrigation. In this way, native plants generally help protect water resources, allowing gardeners to reduce fertilizers, pesticides, and irrigation practices which otherwise can contribute to stormwater runoff pollution and degradation of downstream water quality.

As always, selecting the right plant for the right place is important. Choosing a plant that is appropriate for the local climate, precipitation, soil, and sun exposure will increase the likelihood of plant survival. Learn more about soil preparation and selecting the right plant for the right place by visiting the Clemson Extension Carolina Yards resource page found at www.clemson.edu/cy.



Photos Kim Morganello

South Carolina is home to diverse geographical regions including the Blue Ridge, Piedmont, Sandhills and Coastal Plain. Each region is home to a unique landscape. Knowing which region, including temperature ranges, soil types and rainfall patterns, helps people to select plants that will grow and prosper.

Native, Naturalized & Invasive Species

- **Native:** A species that was growing in the region before European settlement; this plant may have been introduced by forces of nature, animals or even humans but is capable of living and reproducing on its own (Mellichamp, 2014).
- **Naturalized:** Plants that are thoroughly established, yet not native, and have not caused extensive damage or spread. In South Carolina, examples include crape myrtle and camellia species (Porcher and Rayner, 2001).
- **Invasive:** Plants that have been introduced to an area and have established a breeding population, which spreads to the extent that agriculture or native plant communities are damaged. Examples include kudzu, Chinese privet, Chinese tallow, Japanese honeysuckle and multiflora rose (Bodner, 2009).

The environmental benefits of using and protecting native plants in landscapes are significant and include:

- **Water Conservation** – once established, if a native plant is the right plant for the right place, then little to no irrigation will be required.
- **Water Quality** – reduced pollution in stormwater runoff as often times little to no fertilizers and pesticides are needed once native plants are established.
- **Biodiversity** – increasing native pollinator and songbird habitat and wildlife value (Tallamy, 2012).
- **Sense of Place** – Native plants are regional plants that reflect the natural landscape & heritage of an area; thus landscaping with native plants helps to identify a “place” (Mellichamp, 2014).

Highlights of South Carolina Native Plants

The following native plants can be found throughout South Carolina and will thrive in appropriate growing conditions, as recommended below.

Sweetgrass, *Muhlenbergia filipes*: Sweetgrass has gained increasing popularity in the landscape industry as well as in community park spaces, medians and public gardens. In the fall, this plant becomes the “queen of the garden” with a showy purple inflorescence. Sweetgrass prefers full to part sun, sandy soils, and can withstand “wet feet” (periods of inundation). Sweetgrass is of cultural significance as the Gullah community in the Lowcountry of South Carolina uses this plant to make sweetgrass baskets (Porcher and Rayner, 2001).



Photos Kim Morganello



Indian Grass, *Sorghastrum nutans*: Yellow Indian Grass is the South Carolina state grass and is a full sun, warm season native and common prairie grass. Golden plumes of flowers that shimmer in the sun make this grass beautiful in landscapes. Birds and small mammals eat the seeds, and the stalks provide nesting sites.



Photo Janie Marlow

Purple Coneflower, *Echinacea purpurea*: This flower is a gem in the garden that attracts bees, butterflies and hummingbirds. It likes moist, calcareous soils and prefers full sun. Echinacea is used as an herbal remedy for preventing and treating coughs and colds (Porcher and Rayner, 2001).



Photos Kim Morganello

Native Sunflowers, *Helianthus spp.*: Bright yellow flowers are the most noted trait of these native sunflowers, which are sun-loving plants that grow in a variety of conditions. Seeds are high in protein and minerals and, therefore, an attractive food source for birds and animals.



Photos Kim Morganello

Dune Sunflower *Helianthus debilis*



Photos Kim Morganello



Photos Kim Morganello

Narrowleaf Sunflower *Helianthus angustifolius*

Cardinal Flower, *Lobelia cardinalis*: The bright red flowers lasting from July to October make Cardinal Flower a favorite for attracting hummingbirds. Cardinal flower grows naturally in low areas with freshwater inundation including swamp forests and bogs. When choosing a location for Cardinal flower in the home landscape, gardeners should consider damp locations.



Photos Kim Morganello

Oakleaf Hydrangea, *Hydrangea quercifolia*: South Carolina's native hydrangea can grow upwards of eight feet tall and prefers part sun to shade. This deciduous shrub has showy white flowers that cluster upwards of one foot long during the summer; the leaves will attract attention in the fall as they turn color from green to deep red.



Photos Kim Morganello

Virginia Sweetspire, *Itea virginica*: Virginia Sweetspire can grow upwards of six feet tall and equally as wide and has a range of habitats from mountains to coastal plain. The most distinguishable feature of this attractive native shrub is the white elongated flowers abundantly present in late spring to early summer.



Photos Kim Morganello

Beauty Berry, *Callicarpa americana* is a coarse textured shrub with opposite leaves and small light lavender sessile flowers which are fragrant and attractive to beneficial insects. In the fall, clusters of bright purple berries appear and are eaten by birds. Beautyberry can grow up to 8 feet but it may be pruned in winter without sacrificing its glamour.



Photos Kim Morganello



Eastern Red Cedar, *Juniperus virginiana*: Berry-like cones on this evergreen cedar tree provide food for wildlife including mammals and birds, especially cedar waxwing. This tree is the most widespread of any eastern conifer, native to 37 states and grows on dry rocky soils to moist floodplains floodplains (Kirkman, Brown, & Leopold, 2007).



Photo Janie Marlow

Christmas Fern, *Polystichum acrostichoides*: A beautiful, evergreen fern of the wood fern family that lives in moist to dry conditions, perfect for a woodland garden. The leaflets resemble a Christmas stocking or sleigh.



Photo Bill Sharpton

Carolina Jessamine, *Gelsemium sempervirens*: South Carolina's state flower is also known as the "herald of spring." Carolina jessamine blooms in late winter to early spring marking the end of winter in South Carolina. This vine is hardy and can be trained along fences, trees or arbors in full sun to part shade.



Photos Kim Morganello

Coral Honeysuckle, *Lonicera sempervirens*: Coral honeysuckle is an excellent alternative to Japanese honeysuckle and thrives throughout the southeast. This showy vine boasts narrow bright red tubular flowers measuring approximately two inches in length. Coral honeysuckle is a must for people wishing to attract hummingbirds to their home landscape.



Photos Kim Morganello

Another common invasive plant is Japanese honeysuckle, a woody vine that twists around and covers trees and shrubs to outcompete native plant species. This plant sends out runners that take root and grow in a wide range of habitats including fields, forests and wetlands. Japanese honeysuckle was introduced as an ornamental plant and has fragrant white flowers and blackberries.



Photo Chuck Bangeron, University of Georgia, Bugwood.org

Outcompeting Native Plants: Common Invasive Species in South Carolina

Chinese tallow is an example of an invasive plant species in South Carolina, particularly prevalent along the coast. Birds spread the Chinese tallow by consuming the tree's berries. This particular invasive has been popular in landscaping due to its quick growth, showy flowers and fall colors. The aggressive growth rate of Chinese tallow allows it to overtake existing native plant communities. Furthermore, Chinese tallow is a thirsty tree; once established in an isolated wetland, it can take up so much water that the area becomes dry.



Photo Chris Evans, University of Georgia, Bugwood.org

Migrating Monarch butterflies are dependent upon plants for nectar along their migratory route. A Monarch visits a blooming groundsel tree in the coastal zone during the fall migration.



Photos Kim Morganello



Photo Marry Morganello

Additional Resources

Need help selecting the right plant for you? The Clemson Extension Carolina Yards Program can help! Visit the Carolina Yards plant database (www.clemson.edu/cy/plants) to select plants based on region, soil, sun, stormwater best management practice and more.



The South Carolina Native Plant Society is a statewide organization with active chapters that meet throughout the state. Find out about a plant sale, field trip or other native plant events near you! Learn more at www.scnps.org.



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Peer reviewed by Cory Tanner, Horticulture Extension Agent, Clemson University; Dr. Bill Stringer, Faculty Emeritus, Clemson University; Lisa Lord, Wildlife Biologist, Land and Leaves Resources.

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