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Smart Use of Sedge

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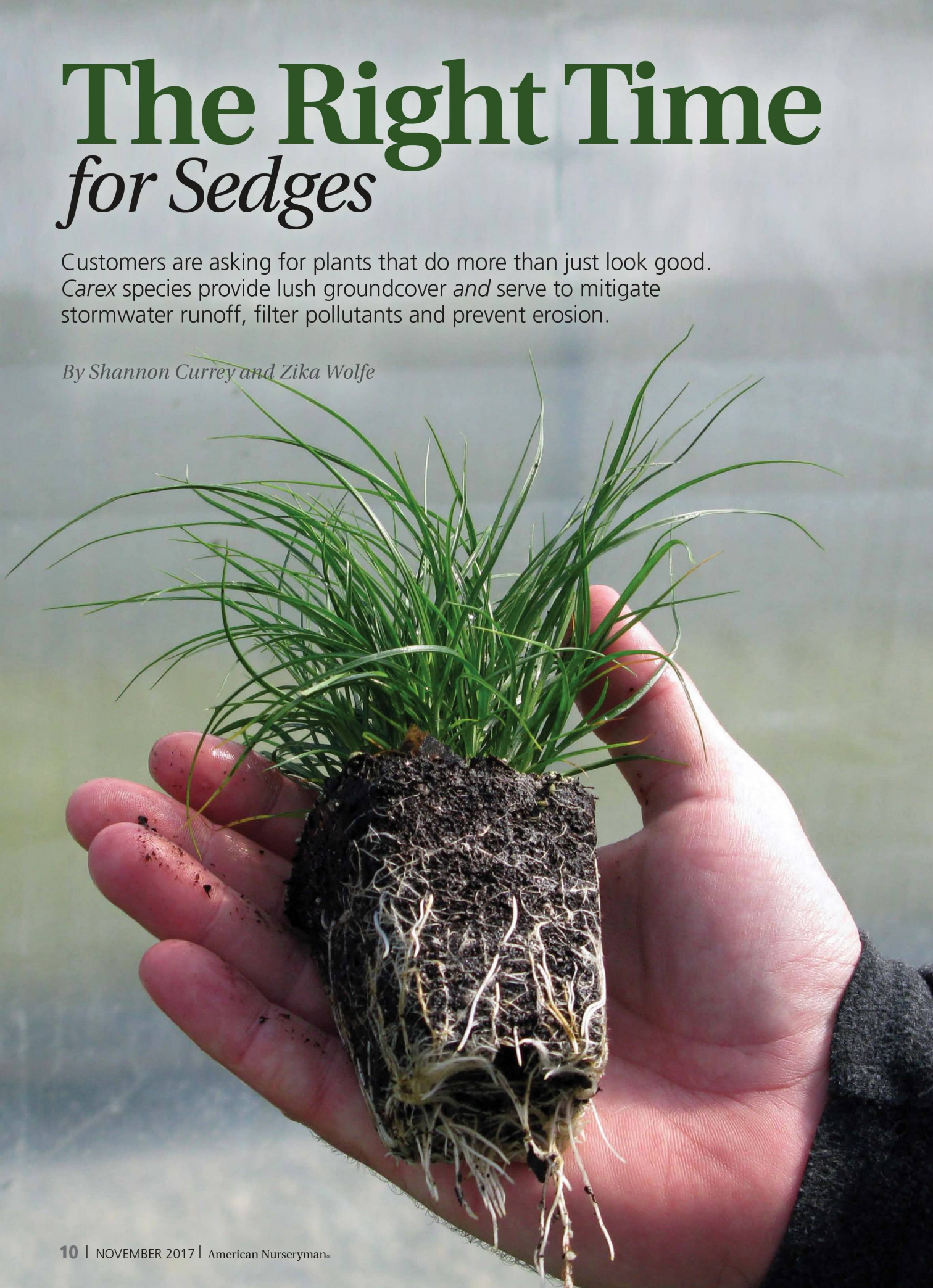
The Right Time *for Sedges*

Customers are asking for plants that do more than just look good. *Carex* species provide lush groundcover *and* serve to mitigate stormwater runoff, filter pollutants and prevent erosion.

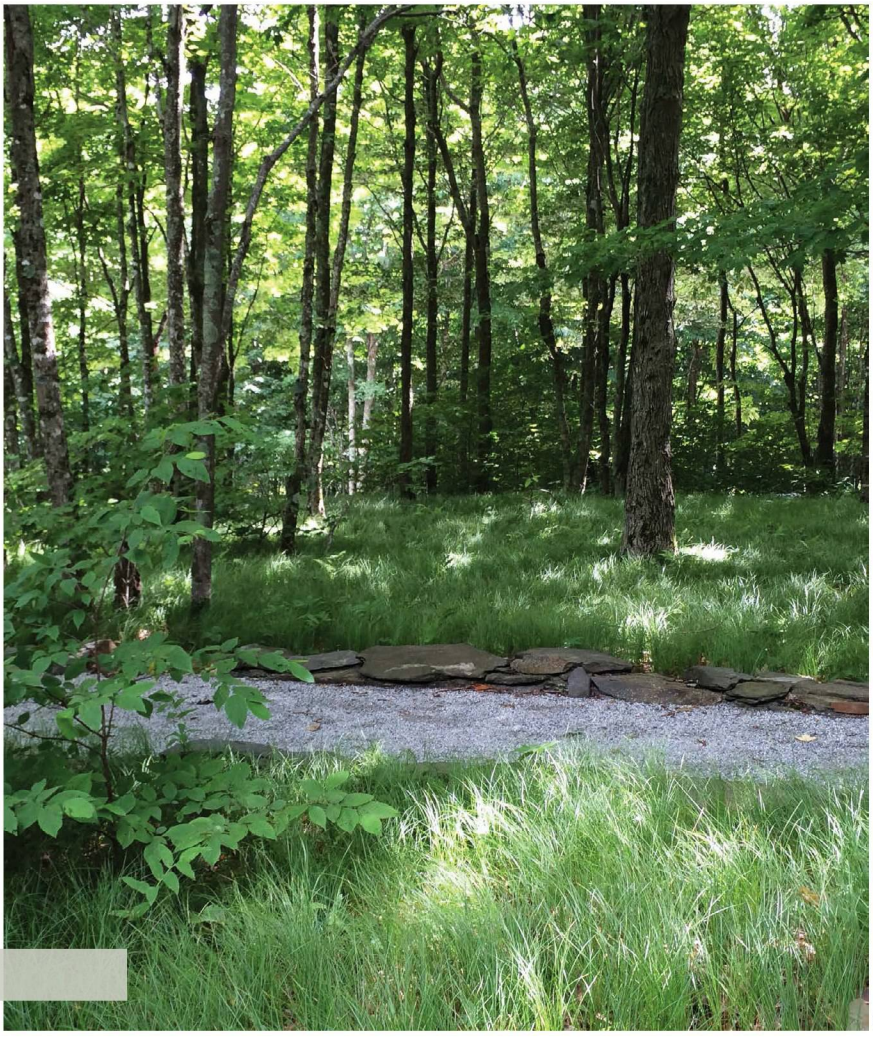
By Shannon Currey and Zika Wolfe



Sedges were almost unheard of in 1991 when we added two to our lineup at Hoffman Nursery. These additions had appealing ornamental qualities that spiced up our inventory and fit our focus on grasses and grasslike plants. At the time, grasses were still relatively unknown, and sedges were rare in the trade.

Nonetheless, the more we worked with sedges, the more their hidden talents came to light. They offered advantages beyond being ornamental. We discovered that sedges, especially native species, are workhorses as groundcovers, alternatives to turf grass and in ecological plantings.

The current popularity of native plants, an emphasis on sustainable landscapes and green infrastructure, and the rise of progressive planting design, have sent demand for sedges skyrocketing. In the past 10 years, sedge sales at Hoffman Nursery have tripled, and our sedge lineup has grown from two to 35. An article in the *Washington Post* this past summer ("How This Plain Plant Can Play a Vital Role," July 12, 2017) declared sedges one of the hottest perennials in the landscape — not for their blooms or foliage, but for their no-nonsense, down-to-earth characteristics.



Carex pensylvanica, Pennsylvania sedge

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What's a sedge?

Sedges are found in *Cyperaceae*, but while many species in *Cyperaceae* are called sedges, in the horticulture trade, "sedge" usually refers to species in the genus *Carex*. *Carex* are among the most wide-spread genera on earth and are found in almost every ecosystem.

At first glance they look like grasses. Fortunately, there are basic features that give clues to whether a plant is a sedge or a grass. Stems on sedges are often triangular in cross-section. Leaf sheaths are fused rather than split as they are in grasses, and the nodes on *Carex* are inconspicuous, whereas grasses have prominent nodes. Sedges produce intricate inflorescences, and it can take detailed examination of mature flower structures to determine the species.

Carex are cool season plants, while most grasses in the trade are warm season. *Carex* photosynthesize most efficiently when soil and air temperatures are mild. They flush out in early spring, bloom in spring or early summer, and slow down during hot months. Cooler soil and air temperatures in fall bring a second flush of growth. This pattern can be a real boost for retail sales. In the landscape, they provide interest when other plants are just getting started in spring or winding down in fall.

It's important for growers to understand these spring-and-fall growth patterns — they translate into nuances for sedges in production. Their cultural requirements differ significantly from growing grasses. Knowledge about these differences is a key to success. For guiding principles, see the sidebar, "Tips for sedge success in nurseries and greenhouses."

Sedges in the marketplace

Most sedges in commercial production fit into two groups: selections from Asia and North American natives.

Carex from Asia are well-adapted to shade and are often variegated. Their vibrancy adds brightness and depth to shady spots, and almost all are suited to container plantings. Many are evergreen in mild climates. They have been popular because they are relatively easy to grow and have solid ornamental qualities.

For many years, showy Asian sedges like *C. oshimensis* 'Evergold' and *C. morrowii* 'Ice Dance' garnered the most attention. Recent, popular introductions like *C. oshimensis* EverColor® 'Everillo' PP21002 and others in the EverColor® series continued to keep the Asian sedge palette fresh.

But now, the spotlight is on North American native sedges. Their popularity may come as a surprise to many, but native *C. pensylvanica* has been our best-selling sedge since 2010. We think of native sedges as talented backup singers in the plant world, operating in harmony with showy plants to make a site better. They're a hard-working, supporting cast of characters that add an important component to ecological plantings and green infrastructure. They range from fine-textured, delicate, woodland treasures, such as *C. appalachica*, to brawny, wetland spreaders like *Carex vulpinoidea*.

Using sedges

We find it helpful to think of using sedges as traditional groundcovers, substitutes for turf grass, and as the matrix

Carex divulsa, grassland sedge

into which plants are layered. All three approaches have the benefit of reducing the need for mulch.

Groundcover plantings tend to be more variable in visual texture and offer a lush, uncluttered style without mowing; lawn substitutes are lower and more uniform and can be mowed a few times a year to maintain a tidy look.

Several sedges lend themselves to lawn alternatives and make the most sense in shady or partially sunny areas where turf grasses are hard to establish. This critical role is fueling their popularity. While we appreciate a lush patch of lawn, keeping a turf grass lawn looking ideal takes a lot of resources. Mowing, watering and fertilizing all have a cost, both in dollars and ecologically. In landscape areas with low foot traffic, a lawn alternative made of sedges provides a low, green, grassy look but needs fewer resources to thrive.

Matrix plantings are anchored with a dense layer of low-growing grasses or sedges. They form a base for interspersing other low, herbaceous perennials. Together, that layer performs essential functions: weed suppression, stormwater management, erosion control and wildlife support. Taller species are then planted into that matrix to form seasonal themes and structural features. It's a recipe for high ecological functioning, long-term stability — and beauty. Piet Oudolf's designs on the High Line in New York and in the Lurie Garden in Chicago's Millennium Park demonstrate its appeal. Other naturalistic designers use this approach as well, and the recently published book, "Planting in a Post-Wild World" by Rainer and West, has brought matrix planting to the forefront of landscape design.

Sedges for the ground layer

Many sedges are smart and beautiful choices for covering the ground. Best-selling Pennsylvania sedge (*C. pensylvanica*) spreads slowly via rhizomes to form a verdant carpet. The narrow, delicate foliage lies in graceful swirls. Native to the eastern half of North America and parts of the Midwest, it is common in upland woods, forest clearings and savannas. Pennsylvania sedge is an obvious choice for pollinator gardens because it hosts several species of caterpillars. It appreciates consistent moisture, but doesn't like wet soils. We've found it works well in relatively dry, shady conditions here in the Southeast. In cooler climates or with consistent moisture, it can take more sun. It mingles well with other herbaceous perennials for matrix plantings.

While Pennsylvania sedge forms a carpet, grassland sedge (*C. divulsa*) creates a distinctive look with mounds of narrow, arching, deep-green foliage. The crown will expand over time, but it stays in place. It can be planted close together for dense coverage or spaced more widely to show off its graceful habit. Intricate, spiky seed heads are subtly showy in spring. A true workhorse, grassland sedge can tolerate heat and humidity and tackles tricky, dry shade. It is dependable under established trees in a wide range of soil conditions. Grassland sedge is a Eurasian species that was often sold in the trade as Berkeley sedge (*C. tumulicola*), a West Coast native.

Carex texensis, Texas sedge

Native Texas sedge (*C. texensis*) is steadily gaining recognition. We've seen it used in large, public landscape areas where it helps lower the need for expensive maintenance. Texas sedge handles light foot traffic, but benefits from stepping stones for constant crossings. As part of a matrix planting or groundcover, its fine foliage complements other plants. *C. texensis* grows naturally in open forests and fields and along roadsides, and does well in rocky and sandy soils. It's found primarily in the Southeast but occurs northward as far as Michigan and New York.

For a more naturalistic look, we love Cherokee sedge (*C. cherokeensis*). It is taller and has broader foliage than the fine-leaved sedges. In spring, flowering spikelets hang delicately from stems that rise above the foliage. It's a Southeastern native that thrives in moist conditions, floodplain forests and stream banks. But it also occurs in forested sites with drier conditions. *C. cherokeensis* spreads slowly via short rhizomes and will reseed to form colonies under favorable conditions. It is a bit wilder looking and less formal.

Other native sedges for ground-level coverage include *C. appalachica*, *C. rosea* and *C. eburnea*, all of which have fine-textured foliage. *C. plantaginea* has broad, dimpled leaves that are very appealing. Several introduced sedges,

Carex amphibola, creek sedge

including *C.* 'Silver Sceptre', *C. flacca* 'Blue Zinger', *C. morrowii* 'Ice Ballet' and 'Ice Dance', spread via rhizomes to form dense cover. The latter three can be assertive in favorable conditions, so use where spreading is desired.

Sedges for rain gardens and stormwater management

Green infrastructure, which uses plants, soils and natural processes to manage water and create healthier urban environments, is also contributing to the increased interest in sedges. Sedge species that handle fluctuating moisture conditions make great additions to rain gardens, bioretention cells and other green systems of managing stormwater. By slowing stormwater flow, they help remove pollutants, increase infiltration and decrease the amount of water to be treated. Fibrous root systems hold soil in place and provide channels for infiltration. As an added benefit, sedges reduce weed competition and support wildlife.

Carex cherokeensis, Cherokee sedge

Creek sedge (*C. amphibola*) handles the variable conditions often needed in green infrastructure projects. In nature, creek sedge grows in deciduous forests, the acidic loamy soil of low flat areas, and on slopes rising from streams throughout much of the eastern U.S., the Southeast and southern prairie states. It thrives in shady conditions, but will tolerate sun with more moisture. It is surprisingly ornamental with narrow, green foliage growing in a fountain-shaped mound.

Tussock sedge (*C. stricta*) can handle periodic dry conditions, but in stormwater features it's best to site it in lower zones where it will get the most moisture. It grows in marshes, bogs, wet meadows and shorelines primarily in the northern and eastern U.S. It forms dense tussocks on wet sites and tolerates seasonal flooding. On drier sites, it tends to be more rhizomatous. The form may vary across its natural range.

Narrow-leaved cattail sedge (*C. squarrosa*) is one of several moisture-loving, native *Carex* that are coarser in texture and heftier in appearance. They prefer moist or wet conditions, but can handle drier periods. Narrow-leaved cattail sedge has a widespread native range, which encompasses the eastern half of North America. It is found in wet meadows and prairies, flood plains and forest edges. The narrow, green foliage forms small clumps. Attractive, spiky, green seed heads appear in late spring.

Carex stricta, tussock sedge

Courtesy of Gregg Hudspeth

Carex squarrosa, narrow-leaved cattail sedge

Other native sedges in the trade that are similar to *C. squarrosa* include *C. lupulina*, *C. lurida*, *C. comosa*, *C. frankii* and *C. vulpinoidea*. They're not as ornamental as the fine-bladed sedges but are excellent workhorse plants for the lower zones of stormwater features. Several can spread over time, a plus for slowing stormwater and reducing erosion.

Sedges make sense

Sedges are gaining a following, which isn't easy for an unassuming plant. But an exciting convergence of events, including ecological landscaping and innovative design, has brought sedges out of the shadows and into the limelight. They may seem like overnight successes, but appreciation for sedges has been a long time coming. We expect sedges to continue their trajectory into the mainstream as more designers and nursery professionals understand their uses and their winning qualities.

Shannon Currey is Marketing Director for Hoffman Nursery Inc., a wholesale nursery specializing in ornamental and native grass liners. Since 2007 she has had a range of responsibilities, including managing the sales and marketing departments. She has authored articles for trade publications and gives talks on grasses to design professionals, industry organizations and at public gardens. Currey can be reached at *shannoncurrey@hoffmannursery.com*. Zika Wolfe became immersed in the world of grasses in 2001. She directed Hoffman Nursery's marketing efforts for several years, transitioned into creative projects, and recently moved into a consulting role.

Tips for sedge success in nurseries and greenhouses

- Sedges can be sensitive to salt concentrations. A slow-release, low-rate fertilizer gives precise control. Keep fertilizer out of the crown.
- Avoid fertilizing in summer and transplant when they are actively growing, fall through early spring.
- Monitor moisture levels carefully and use substrates that drain well. If overwintering, keep sedges on the dry side.
- Sedges grow more slowly than grasses. Give them additional time to finish and to recover after being cut back.

Carex rosea, rosy sedge