

A Sedge by Another Name . . . Is Confusing

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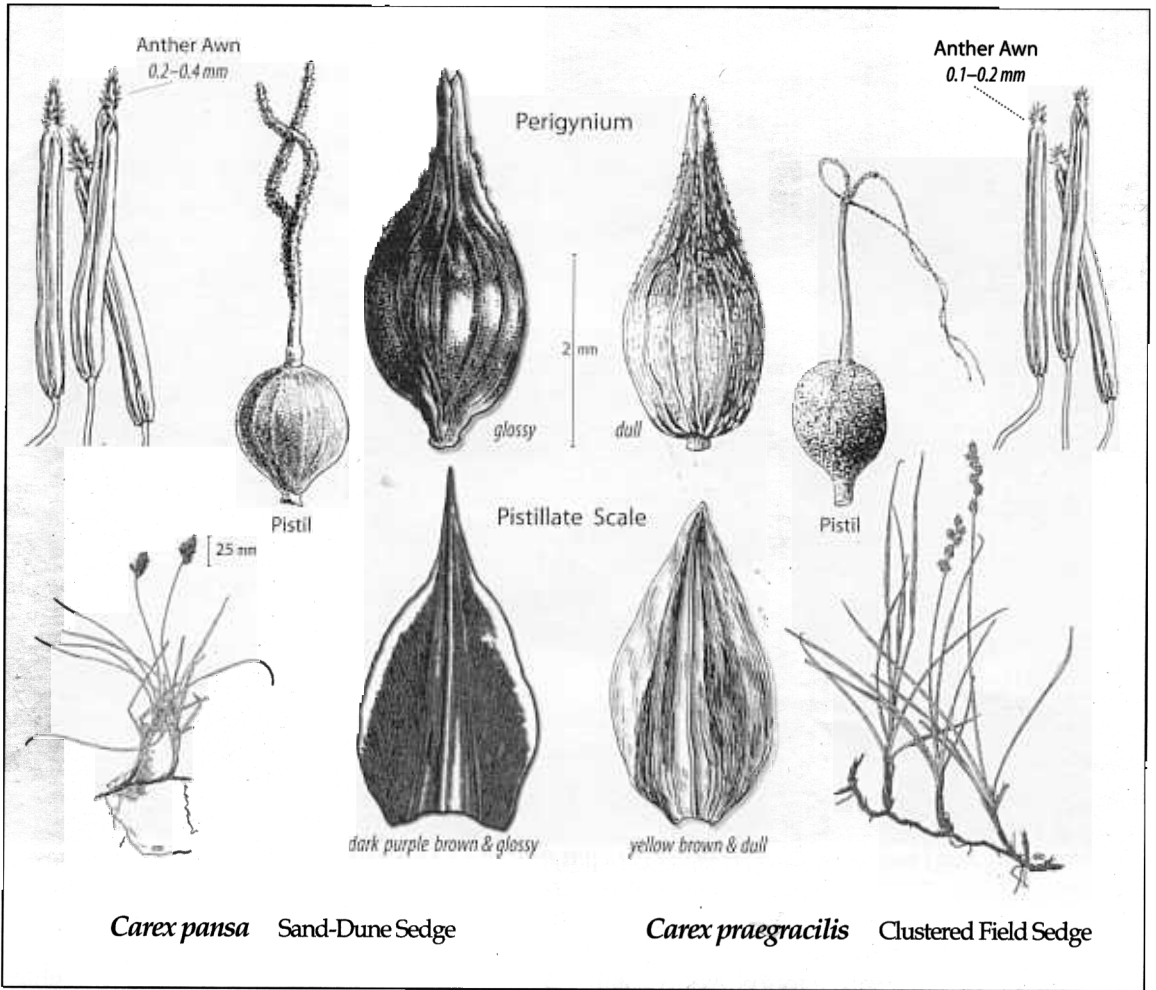
The search for more water-sensible surrogates for traditional turf grasses has focused attention on some long overlooked native sedges of the genus *Carex* that continue to gain popularity and presence in West Coast gardens. A vigorously rhizomatous sedge complex, presently sold as dune sedge, sand-dune sedge, California meadow sedge, or Western meadow sedge, is particularly valuable for lush swards, play areas, dog runs, bank stabilization, oak understory, pond margins, and retention basins. Over the past decade, the horticultural merit of this sedge complex became clear, even as the application of botanical and vernacular names for it grew increasingly blurred.

As with the true grasses, sedges produce small, highly reduced flowers within bracts representing modified leaves or other accessory structures. The relatively small sized, indistinct, and uniquely named inflorescence parts make grass and sedge identification especially challenging. A dissecting microscope, mature plant material, herbarium specimens,

and taxonomic references are needed for confident identifications. Even with such tools, many trained botanists turn a blind eye or appear pained when faced with identifying an unfamiliar grass or sedge. Correct identification is made more difficult by the extremely narrow species concepts delimited in taxonomic treatments. The genus *Carex* includes about 2,000 species worldwide, the largest number within any vascular plant genus. About 200 native *Carex* species inhabit the Pacific States from sea level to subalpine, coastal dunes to foothill woodlands, montane meadows to desert washes. Given the nature of the genus, it is no surprise to find misidentifications and misapplications of names among horticultural material.

Two Species Inhabit Pacific Coast Dunes

Plants currently offered as dune sedge or California meadow sedge belong to a sedge



Carex pansa Sand-Dune Sedge

Carex praegracilis Clustered Field Sedge

Diagnostic features of sand-dune sedge (*Carex pansa*) and clustered field sedge (*C. praegracilis*). Adapted from HL Mason (1969), *A Flora of the Marshes of California*, and KK Mackenzie (1940), *North American Cariceae*

complex treated as two separate species by botanists for nearly 120 years. *Carex praegracilis* was named in 1884 by William Boott, a *Carex* authority from Boston, based on material collected near San Diego, California. In 1888, Liberty Hyde Bailey Jr, renowned Cornell botanist and horticulturist, named *C. pansa* from material collected near the mouth of the Columbia River at Ilwaco, Washington, and along coastal Clatsop County, Oregon.

These details are significant for two reasons. First, the name *Carex praegracilis* holds nomenclatural priority. Second, these collections represent geographical and morpho-

logical extremes within the complex, making recognition of the two species more understandable.

Carex praegracilis is among the most geographically widespread sedges, ranging throughout much of North America except for extreme northeastern Canada and the southeastern United States. With a high tolerance for saline and alkaline soils, *C. praegracilis* occurs on coastal sand dunes, dune slack, dune lakes, springs, stream banks, lakeshores, meadows, prairies, open woodlands, and roadsides.

In contrast, *Carex pansa* represents a geographically and ecologically restricted



A meadow of clustered field sedge (*Carex praegracilis*) in a private San Luis Obispo garden. Photographs by Dave Fross

segregate of *C. praegracilis* found on coastal sand dunes and around dune lakes only along the Pacific Coast from southern British Columbia to the Mendocino Coast, with small, disjunct stands from the Monterey Coast south to near Ventura, and on Santa Rosa Island.

At the southern extent of *Carex pansa* along Central California dune systems, the far more abundant *C. praegracilis* can present a similar appearance and many misidentifications of *C. pansa* have been made, apparently based solely on geography and presence on the dunes. Robert Hoover, in *The Vascular Plants of San Luis Obispo County, California*, expresses this ambiguity: "The fact that plants showing the key-characters of *C. praegracilis* are also found on the dunes indicates that a genetic difference exists. On the other hand, plants identified by *Carex* specialists as *C. praegracilis*

show so much variation among themselves that the validity of *C. pansa* as a species must be judged as doubtful."

Mix-ups and Misnomers

Most of the horticultural material available as dune sedge, sand-dune sedge, California meadow sedge, or Western meadow sedge was collected from California coastal dunes and fits well within the limits of *Carex praegracilis*. However, it is possible that true *C. pansa* may be available from some Pacific Northwest growers.

For over one hundred years, *Carex praegracilis* has been known to botanists as clustered field sedge, field sedge, or blackcreeper sedge (mostly in eastern North America), while *C. pansa* has been known as sand-



An irrigated, mowed, and well-maintained lawn of clustered field sedge (*Carex praegracilis*) at the Leaning Pine Arboretum, on the campus of California Polytechnic State University in San Luis Obispo.

dune sedge or dune sedge. Beginning around 1992, the names California meadow sedge and Western meadow sedge appeared in horticultural references as English names for *C. pansa* without any explanation or historical precedent. To avoid confusion with two eastern North American sedges (*C. praticola* and *C. granularis*) historically called meadow sedge, the names California meadow sedge and Western meadow sedge should be abandoned.

Instead, all *Carex praegracilis*, whether wild or cultivated, should be called clustered field sedge, the name that has the longest historical usage, and is still the preferred English name in the most recent West Coast floras and checklists. If true *C. pansa* is found within existing nursery stock, then the name sand-dune sedge should be applied correctly.

Diagnostic Features

Both *Carex pansa* and *C. praegracilis* produce light to medium green tufts from elongated dark brown to blackish rhizomes. Tufts of *C. pansa* typically rise less than eight inches above the sand surface, with flowering culms to about twelve inches tall. *Carex praegracilis* exhibits much more variation in habit with coastal dune plants being of similar size to *C. pansa*. Inland, *C. praegracilis* tufts are typically taller and broader, often forming tussocks to twenty-four inches tall and wide in montane meadows. Inflorescences of the two differ only in the technical details listed in the table on page 46 and shown in the figure on page 43. To the naked eye, *C. pansa* is separated by the broader, ovoid head of dark purple brown, glossy spikes. *Carex praegracilis* usually produces more elongated ellipsoid inflorescences of dull yellow brown spikes.

Diagnostic Features of Sand-Dune Sedge and Clustered Field Sedge

Scientific Name	<i>Carex pansa</i> LH Bailey, Bot. Gaz. 13:82. 1888.	<i>Carex praegracilis</i> W Boott, Bot. Gaz. 9:87. 1884.
Epithet Etymology	L: <i>pansus</i> , expanded, spread out	L: <i>pra-</i> , before, very; <i>gracilis</i> , slender, thin
	SAND-DUNE SEDGE	CLUSTERED FIELD SEDGE
	CANADA: BC UNITED STATES: WA, OR, CA	CANADA: YT, BC, AB, SK, MB, ON, QC UNITED STATES: AK, WA, OR, CA, ID, NV, UT, AZ, MT, WY, CO, NM, ND, SD, NE, KS, OK, MN, IA, MO, WI, IL, MI, IN, KY, OH, NY, PA, VA, ME, VT MEXICO: BCN, CHH, DUR, DF
Ecology	Coastal sand dunes, dune slack, dune lakes. Tolerant of saline soils.	Coastal sand dunes, dune slack, dune lakes. Interior springs, streambanks, lakeshores, meadows, prairies, open woodlands, roadsides. Tolerant of alkaline and saline soils.
Inflorescences	<i>length</i> 12–25 mm <i>shape</i> ovoid	10–40 mm ellipsoid
Spikes	<i>shape</i> pistillate ovoid; staminate ellipsoid	pistillate ellipsoid; staminate ellipsoid
Pistillate Scales	<i>color</i> dark reddish brown to purple black <i>surface</i> glossy <i>margins</i> broadly hyaline	yellow brown to pale reddish brown dull narrowly hyaline
Perigynia	<i>length</i> 3.1–4.2 mm <i>body shape</i> ovate <i>base</i> abruptly narrowed into a stipe > 0.3 mm <i>color</i> dark brown to purple black at maturity <i>surface</i> glossy	2.2–3.7 narrowly ovate abruptly narrowed into a stipe < 0.3 mm brown to nearly black at maturity dull
Anthers	<i>awn length</i> 0.2–0.4 mm <i>filaments</i> short, included within staminate scales	0.1–0.2 mm long, exerted beyond staminate scales

Cultivars

Nurseries continue to work with these sedges, and collections from a number of sites are now sold on the West Coast. The selection *Carex praegracilis* 'Laguna' from the Laguna Mountains of San Diego County is offered by some Southern California growers. Other selections and named cultivars will surely develop as horticulturists observe plants in garden conditions, and as additional collections from wild populations enter the trade. More selections from summer-dry sites are needed.

Culture

Water needs are typically less than for traditional turf grasses. Under humid summer

conditions (*Sunset* zones 1–5, 15–17, 22–24), leaves remain green with little or no supplemental water; under dry summer conditions (*Sunset* zones 6–14, 18–21), plants require some supplemental irrigation to maintain a fresh appearance and to prevent drought dormancy. Fertilization is unnecessary in most soils, although a modest application of nitrogen will ensure richer green foliage. Mowing is a matter of taste and application. A tidy two-inch height might require a monthly trimming with a traditional lawn mower, while an informal meadow needs only an annual cutting with a string line trimmer. Rust is an occasional problem in coastal plantings under frequent overhead irrigation, but easily corrected by reducing irrigation frequency. 🌱