

Noteworthy Collections: VIRGINIA

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Carex arkansana (L.H. Bailey) L.H. Bailey, Arkansas sedge (CYPERACEAE)—**City of Alexandria:** Seasonally-wet meadow east of S. Quaker Lane below Duke Street (Rt. 236) and north of the railroad tracks, 2 June 2005, R.H. Simmons 2531 (City of Alexandria herbarium [coa], Virginia Department of Conservation and Recreation, Division of Natural Heritage herbarium [dnh], MICH, Maryland Department of Natural Resources-Annapolis herbarium [tawes], and US).

Significance. This is the first record of *Carex arkansana* in Virginia. Its native range extends from Texas north to Kansas and east to Arkansas, Missouri, and Illinois where it occurs in moist prairies, low open areas, and woodland glades (Ball 2002). The Virginia site is just east of the location of the old Seminary Station (a place name on a number of old labels at US in the D.C. and Vicinity Collection) and was a major railroad stockyard and fruit-packing station until the late 20th century. This species undoubtedly became established at this site, eventually forming a nearly impenetrable turf with numerous other carices, when the railroad tracks were removed and seed material from imported hay was graded into the soil.

Carex australis Mack., Southern sedge (CYPERACEAE)—**City of Alexandria:** Seasonally-wet meadow east of S. Quaker Lane below Duke Street (Rt. 236) and north of the railroad tracks, 2 June 2005, R.H. Simmons 2529 (City of Alexandria [coa], MICH, and Maryland Department of Natural Resources-Annapolis [tawes]); same site, 25 May 2006, R.H. Simmons & J.M. Parrish 2729, 2730 (Virginia Department of Conservation and

Recreation, Division of Natural Heritage [dnh], US); **Prince William County:** Above a rocky branch that runs along the edge of Hockersmith Park, off Northgate Drive, ca. 0.5 miles north of Rt. 234, 8 June 2006, C.T. Bryson 21685 (VPI).

Significance. These two collections represent the first documentation of this species from Virginia. Its native range extends from Kentucky south to Alabama west to Texas and north to Nebraska and Iowa where it occurs on calcareous soils of prairies, woodland glades, and open areas (Fernald 1950, Ball 2002). The Alexandria population of *Carex australis* became established in the same way as the preceding species and the Prince William County occurrence is thought to have been established through imported hay that was used for erosion control on or near the stream bank (Charles Bryson, pers. comm.).

Carex flacca Mack. var. *flacca*, Hammock sedge (CYPERACEAE)—**City of Alexandria:** Seasonally-wet meadow east of S. Quaker Lane below Duke Street (Rt. 236) and north of the railroad tracks, 28 May 2004, R.H. Simmons 2183 (City of Alexandria [coa]); same site, 16 May 2007, R.H. Simmons & J.M. Parrish 2914 (MICH, US).

Significance. This is the first record of *Carex flacca* var. *flacca* in Virginia. The species is native to Texas, Oklahoma, Kansas, and Missouri where it grows in wet open areas (Standley 2002). In Virginia, it occurs with the previously mentioned Alexandria specimens and became established in the same way.

Carex hirta L., Hammer sedge (CYPERACEAE)—**City of Alexandria:** wet soil, 13 May 1918, E.C. Leonard 347 (US); dump at border of swamp, 13 May 1918, E.C. Leonard 358 (US); dense colony on a shaded, grassy

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bank above swamp forest at edge of Hunting Creek, Jones Point Park, south side of Woodrow Wilson Bridge, ca. 0.3 km SE of intersection of Royal St. and Jones Point Dr., 20 Aug. 2004, *R.H. Simmons 2331* (City of Alexandria [coa], MICH); same site, 31 Aug. 2004, *M.T. Strong & R.H. Simmons 3458* (US); dense colony in open ditch along gravel road, Jones Point Park, south side of Woodrow Wilson Bridge, ca. 0.15 km SE of intersection of Royal St. and Jones Point Dr., 25 May 2006, *R.H. Simmons & J.M. Parrish 2725* (Virginia Department of Conservation and Recreation, Division of Natural Heritage [dnh], Maryland Department of Natural Resources-Annapolis [tawes]).

Significance. The two 1918 specimens were collected (somewhat immature) as *Carex lurida* Wahlenb. and were annotated as *C. hirta* by Strong and Simmons in 2004. They represent the first documentation of *C. hirta* in Virginia and the southernmost station known for the species in the eastern United States. *Carex hirta* is a rhizomatous Old World species that is locally naturalized throughout the northeast and mid-Atlantic states along roadsides and in open disturbed places (Fernald 1950). Frye and Lea (2001) note that the first documented Maryland specimen of *C. hirta* was collected in 1998.

The species still persists at or near the original collecting sites, which likely are now part of Jones Point Park. The Park (also called Alexandria Light on some old labels at US for the historic lighthouse at the water's edge) borders the mouth of Hunting Creek on the south and the Potomac River on the east and is part of the George Washington Memorial Parkway. Much of the Park originally was a large, gravelly cove (Battery Cove) and a mosaic of swamp forest and extensive gravel bars and tidal marsh. Large areas within the Park, particularly to the north and west, were filled in with soil in 1910 for use as a shipyard, which continued in operation through World War I (Pamela Cressey, City of Alexandria archaeologist, pers. comm.). Two robust colonies of *C. hirta* are currently known from the Park, each growing in dry to moist soil in full sun to shade. The southernmost colony grows on a shaded, grassy bank between a swamp forest remnant and a mowed ballfield and is approximately 6 m² in size. The second colony is approximately 3 m² and grows in disturbed ground along a

gravel access road near the south side of the Woodrow Wilson Bridge.

Carex opaca (F.J. Herm.) P. Rothr. & Reznicek, Bicknell's sedge (CYPERACEAE)—**City of Alexandria:** Seasonally-wet meadow east of S. Quaker Lane below Duke Street (Rt. 236) and north of the railroad tracks, 28 May 2004, *R.H. Simmons 2182* (MICH, US).

Significance. This is the first record of *Carex opaca* in Virginia. The species is native to Oklahoma north to Kansas and east to Missouri and Arkansas, including Illinois and Mississippi, where it grows in low prairies, open ditches, and poorly drained soils (Mastrogioseppe et al. 2002). At the Alexandria site in Virginia, it occurs with *C. arkansana*, *C. australis*, and *C. fissa* var. *fissa*, all of which became established from imported hay. Bryson (2007) recently reported *C. opaca* for North Carolina, where it also was likely introduced "in contaminated hay, grass seeds, or machinery" during road construction. He also notes that there is speculation as to whether the Mississippi occurrences of *C. opaca* were introduced during road construction as well.

Cyperus surinamensis Rottb., Tropical flatsedge (CYPERACEAE)—**City of Alexandria:** Sand and gravel depositional bars along north side of Cameron Run, ca. 1 km NW of Telegraph Road, 7 Sept. 2004, *R.H. Simmons 2365* (City of Alexandria [coa]); same site, 9 Sept. 2004, *M.T. Strong & R.H. Simmons 3459* (US).

Significance. This is the first record of *Cyperus surinamensis* in Virginia, where it is undoubtedly adventive. The species was found growing as a single clump of several culms in sand along the edge of a floodplain sand bar. It is native to tropical, subtropical, and warm temperate regions of the Americas. We have found no reports of it occurring in the Old World. It occurs from the southern United States south through the West Indies, Mexico, Central America, to South America. In the United States, it is most common in Florida and coastal counties along the Gulf Coast, but has been recorded from South Carolina, Georgia, Louisiana, Alabama, Mississippi, Arkansas, Kansas, Oklahoma, Tennessee, and Texas (Tucker 2002, Kartesz 2007).

Tropical flatsedge is a pioneer species that quickly colonizes wet or moist areas in sandy or gravelly soils of lake and pond margins, marshy or swampy meadows and pastures, agricultural fields, roadside ditches, and waste areas. It can be easily distinguished from most other *Cyperus* in the Americas by its distally scabrid culm (vs. smooth in other species).

Gamochaeta simplicicaulis (Willd. ex Spreng.) Cabrera, Simple-stem cudweed (ASTERACEAE)—**City of Suffolk:** In dry sand along roadside, South Quay pine barrens, ca. 2 km NE of Cherry Grove and ca. 0.5 km SE of Cox Landing, 20 July 2003, R.H. Simmons et al. 1329 (US).

Significance. This is the first record of *Gamochaeta simplicicaulis* in Virginia and the northernmost station known in the eastern United States. The species is native to South America and has become naturalized in the United States (recorded previously from North Carolina, South Carolina, Georgia, Florida, and Alabama), New Zealand, Australia, and Java (Nesom 2006).

Several specimens of *Gamochaeta simplicicaulis* were found growing in deep sand on a slightly elevated bank along the main road through the sandhill communities between Milk Landing and Cherry Grove. These communities, east of the Blackwater River and south of Milk Landing, once-comprised many thousands of acres. They were botanized by M.L. Fernald, Bayard Long, and Carroll Williams in the 1930s during their quest to find “a continuation southward of the white-sandy pine barrens which occur south of Zuni (along the Blackwater River)” (Fernald 1936). They explored this area after a local resident told them where they could find a large expanse of sand south of the South Quay bridge (over the Blackwater River) in Nansemond County (now City of Suffolk). Throughout the 1930s and 40s, they discovered numerous botanical rarities at this site, many of which have not been seen since in Virginia. This site is also famous as one of two remaining stations in Virginia for naturally-occurring populations of Longleaf Pine (*Pinus palustris* Mill.), a state-rare species (John Townsend, pers. comm.). Sadly, many of the sandhill communities and springhead pocosins at this site that remained relatively undisturbed from the time of Fernald’s visits

up through the turn of the century were destroyed in 2001 by overly-destructive pulpwood harvesting methods, rutting, and soil bedding by International Paper, despite knowing of the presence of rare communities there.

Sagina procumbens L., Matted pearlwort (CARYOPHYLLACEAE)—**City of Alexandria:** Several plants growing in cracks of old brick sidewalk near intersection of S. Columbus and Prince Streets, Old Town, 27 June 2006, R.H. Simmons & J.M. Parrish 2789 (City of Alexandria [coa]); **Arlington County:** Several dense colonies growing with moss on rocky falls of Four Mile Run, Barcroft Park, ca. 0.1 km SE of S. George Mason Drive, 16 June 2006, R.H. Simmons, J.M. Parrish, & A.H. Fleming 2788 (US).

Significance. These two collections represent the first documentation of this species in Virginia. *Sagina procumbens* is apparently native to Europe and has been introduced into Greenland, Canada, the northeastern United States south to Maryland and West Virginia, Arkansas, Illinois, Iowa, Wisconsin, Minnesota, Colorado, Utah, Montana, California and the Pacific Northwest, and Alaska; also Central and South America, Asia, and Antarctica (Crowe 2005). Shetler and Orli (2000) list *S. procumbens* for Washington, D.C., and Weakley (2007) lists a single occurrence from a parking lot at the “summit of Roan Mountain” in North Carolina and notes that it is “almost certainly adventive” at that location.

Even though they often share many of the same habitats, *S. procumbens* can be readily distinguished from the more common, native species *S. decumbens* (Elliott) Torr. & A. Gray (an annual) by its spreading, perennial root system and persistent basal rosette of leaves. Also, the flowers are usually 4-merous in *S. procumbens* and 5-merous in *S. decumbens*.

DISTRICT OF COLUMBIA, MARYLAND, AND VIRGINIA

Oenanthe javanica (Blume) DC., Java waterdropwort (APIACEAE)—**District of Columbia:** Kenilworth Marsh, southern edge at *Typha* upland ecotone, 15 July 1999, B.W. Steury 990727 (US). **Maryland. Prince Georges County:** In deep mud of ditch next to parking lot, Buck Lodge Community Park,

east end of Buck Lodge Road, Buck Lodge, 2 Sept. 2005, *M.T. Strong, R.H. Simmons, & J.M. Parrish* 3566 (US). **Virginia. City of Alexandria:** Densely-matted colony growing in shallow water at edge of impoundment wetland along asphalt trail, Dora Kelley Nature Park, ca. 0.5 km NW of intersection of Sanger Ave. and Beauregard St., 9 Sept. 2003, *R.H. Simmons* 1581 (US). **Arlington County:** Nearly continuous colony along strong-flowing, spring-fed small stream (Lucky Run) on west side of Walter Reed Dr. between Wakefield St. and Four Mile Run, 25 Sept. 2007, *R.H. Simmons* 2962 (US). **Fairfax County:** Thickly-matted colony in open shrub swamp at edge of old-age *Quercus bicolor* swamp forest and Reston Association trail, Runnymede Park, Town of Herndon, ca. 0.4 km ENE of intersection of Herndon Parkway and Queens Row St., ca. 0.3 km WNW of intersection of Creekbend Dr. and Stuart Rd., 2 Aug. 2003, *R.H. Simmons* 1399 (Virginia Dept. of Conservation and Recreation, Division of Natural Heritage [dnh], GMUF, NA, US).

Significance. These are the first records of *Oenanthe javanica* for the District of Columbia, Maryland, and Virginia. Java waterdropwort is native to eastern Asia and occurs in China, India, Indonesia, Japan, Korea, Laos, Malaysia, Myanmar, Nepal, New Guinea, Pakistan, Philippines, Russia, Thailand, and Vietnam. It is a major vegetable in many parts of the Orient, the leaves and shoots of which are a rich source of vitamins and minerals. In traditional Chinese medicine, it is the dietary herb "shui qin" (Pu and Watson 2005). In the Washington, D.C. region, Asian immigrants have been observed planting it along the edges of springs and small streams in natural areas and actively cultivating it as a salad green. It now appears to be escaping cultivation and is quickly becoming naturalized along streambanks and in ditches, swales, and other wet habitats. Previously, it had been recorded only from Missouri, where it was collected in 1996 near a bridge on the southern side of Race Horse Lake, an artificial lake in Johnson County. By 2001, the population had spread, occupying the entire shoreline of the lake (Yatskievych and Raveill 2001).

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