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NEW RECORDS OF NATIVE AND INTRODUCED PLANTS FROM NEBRASKA

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Recent field work in Nebraska by staff of the University of Nebraska Herbarium has produced a number of records of previously uncollected specimens and has confirmed the presence of species collected only a few times long ago. Some of the records are of American species which are indigenous to Nebraska or which have recently spread to the state, while other records are of foreign species which are thoroughly established in the wild. Some of these are potentially serious weeds, though none have reached that stage yet.

All specimens cited are deposited in the University Herbarium in Nebraska Hall, Lincoln, except that those marked with an asterisk are at the University of Nebraska at Omaha.

Typha domingensis Pers. Typhaceae. Lancaster Co., Pawnee Lake, in extensive Typha marsh on west side, 18 September 1974, Kaul 2426. This extends the range north from Kansas.

Potamogeton crispus L. Potamogetonaceae. Dodge Co., Fremont State Lakes, 22 June 1969, Sutherland 2383*. Morrill Co., Bridgeport State Lake, in shallow water along shore, 7 July 1974, Churchill 3848. Pawnee Co., Burchard Lake, submerged along inlet, 28 July 1973, Churchill 2039. Sherman Co., Beaver Creek State Wayside, shallow water, 31 May 1973, Churchill 777. This species is thoroughly established in the northeastern states and in California, and it appears to be spreading rapidly in Nebraska man-made lakes.

Vallisneria americana Michx. Hydrocharitaceae. Cherry Co., east end of Ballard's Marsh, 9 July 1973, Churchill 1652. This is our second record for the state, the first being Kiener 27528, "21" Lake, Cherry Co., 27 August 1951. This submerged aquatic is abundant in eastern and northern states but in Nebraska, where it is at the western edge of its range, it is rare. It is an important duck food.

Aegilops cylindrica Host. Poaceae. Douglas Co., Omaha, at 44th & Cass St., along tracks, 17 June 1971, Sutherland 2983. Lancaster Co., at 19th & Vine St. along tracks, Lincoln, 29 June 1972, Churchill 249. This plant was introduced from Europe and is becoming a bad weed in some states, though not in Nebraska.

Agropyron intermedium (Host) Beauv. Poaceae. Cuming Co., south of

West Point along US 275, 3 July 1972, Churchill 221. Dawson Co., 4 mi. west of Lexington on US 30, disturbed ground by railroad, 3 July 1973, Churchill & Sutherland 1327. Douglas Co., roadside at Neb. 36 & 52nd St., Omaha, 2 August 1973, Churchill & Sutherland 2129. This European grass is grown in the Pacific Northwest for forage and it has become thoroughly established in western Nebraska.

Avena fatua L. Poaceae. Lancaster Co., south of Lincoln on US 77 9 mi., along roadside, 10 July 1968, Sutherland & Kaul 1850. Our only other record is Hall Co., north of Grand Island airport, along roadside, 12 July 1962, Lamaire 2371. This is the European wild oat and is not to be confused with the cultivated oat. It is not common in Nebraska, though in many parts of the West it is a serious weed.

Cynodon transvaalensis Davy. Poaceae. Lancaster Co., thoroughly established in lawns, University campus, Lincoln, 3 July 1968, Kaul & Sutherland 2242. This African grass presists and spreads in lawns but it does not appear to be a bad weed.

Hystrix patula Moench. Poaceae. Dakota Co., wooded area in Basswood Wildlife Refuge, 2 August 1973, Churchill 2223. The bottle-brush grass grows in cool woodlands. The forests of eastern Nebraska are the western limits for this native grass. This collection is our first record of the plant from northeastern Nebraska.

Miscanthus sacchariflorus (Maxim.) Hack. Poaceae. Douglas Co., field on 60th St. north of Redick St., Omaha, 17 September 1969, Sutherland 2603. Lancaster Co., spreading rapidly in draw on north side of Branched Oak Lake, 12 August 1973. Churchill & Kaul 2353. The species is reported from Sarpy and Kearney Counties. This Asiatic grass resembles the common garden ornamental M. sinensis. Its vigorously spreading habit makes it a potentially troublesome weed. These are the first Nebraska records of wild specimens.

Fimbristylis autumnalis (L.) R. & S. Cyperaceae. Antelope Co., 8 mi. south of Ewing on US 275, along shore of oxbow lake, 30 August 1974, S. & K. Churchill 4262. Cass Co., Louisville Lakes, along sandy shore of pond, 7 October 1973, Churchill 2625. This extends the range from southwest Iowa and from northwest Missouri.

Scirpus pendulus Muhl. (S. lineatus, of reports). Cyperaceae. Douglas Co., near Valley, flood plain woodland, 23 June 1949, Kiener 24645. Gage Co., 3 mi. east of Odell on Nebr. 8 and 1½ mi. north of Nebr. 12, intermittent pond in pasture, 13 June 1974, Churchill 3564. Jefferson Co., 7 mi. south of Fairbury on Nebr. 15, along roadside springs on bluffs, 24 May 1974, Churchill 3044. Saunders Co., just north of Morse Bluff on Nebr. 79, wetland prairie, 10 June 1974, Churchill 3507; 25 June 1974, Churchill 3598. This is an extension of the range north from eastern Kansas and west from Iowa.

Acorus calamus L. Araceae. Garfield Co., 2 mi. north of Burwell, abundant in wet meadow, 15 June 1968, Kaul, Sutherland, & Brown 2196. The only previous state collection is Otoe Co., 1889, Webber s.n. While this marsh plant is common in northern and eastern states, it is rare in Nebraska.

Corallorhiza wisteriana Conrad. Orchidaceae. Richardson Co., Indian Cave State Park, northeast slope in oak-hickory forest, 12 May 1973, D. A. Becker s.n. The species is known from Missouri.

Quercus alba L. Fagaceae. Richardson Co., 6 mi. north & 2½ mi. west of Humboldt, hilly pasture, P. Shildneck C-7333. This supports an earlier collection — Richardson Co., northwest of Humboldt, a colony associated with Quercus macrocarpa, 30 August 1937, B. F. Kiltz s.n. This eastern tree is an extention from Missouri.

Polygonum cespitosum Blume. Polygonaceae. Douglas Co. east edge of Memorial Park, Omaha, 30 September 1967, Sutherland 1311*; 18 October 1973, Sutherland 3630*. This Asiatic smartweed is another potentially serious weed in Nebraska. These are our first records for the state.

Polygonum cuspidatum Sieb. & Zucc. Polygonaceae. Douglas Co., Elmwood Park, Omaha, north end of ravine, spreading rapidly, 18 October 1973, Sutherland 3631. This vigorous knotweed from eastern Asia is an aggressive colonizer but it does not appear to seed itself here.

Reseda lutea L. Resedaceae. Dixon Co., 2 mi. south of Ponca along Nebr. 12, on disturbed west-facing prairie slope, scattered but common, 6 June 1974, Sutherland & Churchill 3678. This adventive species from Europe is occasional in eastern North America. This is the first report of the species and family for the Great Plains.

Lathyrus ochrolencus Hook. Fabaceae. Box Butte Co., Alliance, 5 July 1906, Dr. C. H. Churchill s.n. Dawes Co., west Ash Creek area, moist shady canyon, 12 June 1971, L. E. Urbatsch 488. This is an extention south from the Black Hills of South Dakota.

Acalypha ostryaefolia Riddell. Euphorbiaceae. Douglas Co., just west of junction of W. Dodge Rd. & US 275, September 1970, Stenglein s.n.*. Nebraska is on the northwestern edge of the range of this native plant. It is also reported from Richardson Co.

Hypericum pyramidatum Ait. Hypericaceae. Otoe Co., 3 mi. southeast of Nebraska City (Ne¼, Se¼, Sec. 23, T8N, R14E), at edge of disturbed upland prairie on Missouri River bluffs, 21 September 1974, Churchill & Upchurch 4733. Richardson Co., at Sec. 10, T1N, R17E, on shoulder of road Rt. 159, 10 July 1974, P. Shildneck C-6757; northwest of Rulo at Sec. 1, T1N, R17E, on steep roadcut in sandy clay soil, 12 July 1974, P. Shildneck C-6815. This extends the range west from Iowa and north from Kansas and Missouri.

Lythrum salicaria L. Lythraceae. Fillmore Co., along stream 1 mi. east of Exeter, 9 August 1973, Churchill, Kaul, & Sutherland 2292. This ornamental

aquatic plant from Europe infests streams and lakes in the northeastern and northwestern states, where it crowds out native vegetation. So far it is not a problem in Nebraska.

Monotropa uniflora L. Ericaeae. Otoe Co., 3 mi. southeast of Nebraska City (Sec. 23, T8N, R14E), on east-facing bluff woods, 21 September 1974, Churchill & Upchurch 4747. This species was reported by Winter (1936) for Nemaha Co. but no specimen could be located.

Lysimachia punctata L. Primulaceae. Douglas Co., 46th & Farnam St., along railroad embankment, Omaha, 13 June 1971, Sutherland 2974. This is the first record of this European species in Nebraska. It is reported as occasional in the northeastern states.

Asclepias viridis Walt. Asclepiadaceae. Jefferson Co., 6 mi. south of Fairbury on Nebr. 15, upland pasture, 24 May 1974, Churchill 3045. We have only two other records of this species from the state, one from Richardson, the other from Webster County. In addition to this, a site record for Lancaster Co., Pioneers Park, Lincoln, virgin prairie, 20 May 1973, Kaul, has been noted.

Hydrophyllum appendiculatum Michx. Hydrophyllaceae. Douglas Co., deep woods north of Hummel Park, abundant, 25 May 1971, Sutherland & Parker 2918. This collection extends the known range westward from central Iowa.

Memorial Parks, Omaha, apparently spreading vigorously, 2 May 1964, Watson s. n.*. This native of the forests in eastern states has undoubtedly escaped from cultivation in our range. This is our only record of it persisting and spreading outside of cultivation in Nebraska.

Salvia sylvestris L. Lamiaceae. Seward Co., US 34 1 mi. west of Lancaster Co. line, grassy roadside, 9 June 1968, Sutherland & Kaul 1698. This ornamental European sage-mint is found occasionally throughout the country east of the Rocky Mountains. This is our first record for Nebraska.

Vernonica agrestis L. Scrophulariaceae. Douglas Co., Memorial Park, Omaha, lawn weed, 16 April 1964, Hoham s. n.*; 8 April 1968, Sutherland 1378. The species also occurs in Lancaster Co. It shows every sign of becoming a troublesome lawn weed in eastern Nebraska.

Veronica hederaefolia L. Scrophulariaceae. Douglas Co., northeast corner of Hummel Park, wooded creek bank, 28 April 1969, Wylie s. n.*; 9 April 1970, Sutherland & Wylie 2606. This is the first record of this European plant this far west.

Galium verum L. Rubiaceae. Douglas Co., at 168th St. and Hwy 6, just west of Omaha, upland prairie, 8 June 1974, Churchill & Sutherland 3422. This is the first report of this naturalized yellow bedstraw from Europe for Nebraska.

Lonicera japonica Thunb. Caprifoliaceae. Douglas Co., established along railroad at Leavenworth St. & Saddle Creek Rd., Omaha, 13 June 1971, Sutherland 2979*. This is our first record of this Asiatic vine growing wild in Nebraska.

Gnaphalium obtusifolium L. Asteraceae. Cuming Co., 3 mi. south of West Point and ¼ mi. east, sandy upland, 2 September 1973, Churchill 2535; 25 September 1974, Churchill 4747. This species was collected in the state once before: Otoe Co., Nebraska City, woods (rare), September 1897, no collector or number. This is a north extention from eastern Kansas and western Missouri.

Recent intensive field study of the vegetation of Cuming County has revealed the existence of Sandhills-Western Nebraska vegetation at its easternmost extension. These typical representatives of Sandhills flora appear in sandy uplands there, and all are records for so far east in this part of the state: Andropogon gerardi Vitman X Andropogon hallii Hack., Churchill 2398; Calamovilfa longifolia (Hook.) Scribn., Churchill 2395; Eragrostis trichodes (Nutt.) Wood., Churchill 2396; Yucca glauca Nutt., Churchill 1085; Eriogonum annuum Nutt., Churchill 2393, 4136; Rumex venosus Pursh, Churchill 969; Corispermum nitidum L., Churchill 4693; Lesquerella ludoviciana (Nutt.) Wats., Churchill 975; Lathyrus polymorphus Nutt. ssp. polymorphus, Churchill 3095; Asclepias arenaria Torr., Churchill 1994; Lithospermum caroliniense (Walt.) MacM., Churchill 3102; Penstemon albidus Nutt., Churchill 3099; Cirsium canescens Nutt., Churchill 980; Haplopappus spinulosus (Pursh) DC., Churchill 1289; Hymenopappus tenuifolius Pursh, Churchill 971; Thelesperma filifolium (Hook.) Gray var. intermedium (Rydb.) Shinners, Churchill 4134.

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