

REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: ***Schoenoplectus pungens* (Vahl) Palla** common three-square twine-bulrush

Species comprises three varieties, two of which occur in R2:

var. *longispicatus* (Britton) S.G. Sm.

SYNONYMS: *Scirpus americanus* Pers. var. *longispicatus* Britton; *Scirpus americanus* Pers. subsp. *pungens* var. *longispicatus* (Britton) R.L. Taylor & MacBryde; *Scirpus americanus* Pers. var. *polyphyllus* (Boeck.) Beetle [Harrington 1954]

var. *pungens*

SYNONYMS: *Scirpus americanus* Pers. misapplied [Rydberg 1932; Van Bruggen 1976; Great Plains Flora Association 1977; Dorn 1992; Kolstad 1991]; *Scirpus pungens* Vahl [Kolstad 1991]

Evaluator's note: The name *Scirpus americanus* Pers. has historically been misapplied by students of the Great Plains and Rocky Mountain floras to this widespread taxon, correctly named *Scirpus pungens* Vahl [and here treated as *Schoenoplectus pungens* (Vahl) Palla following Smith (1995)]. However, true *Scirpus americanus* [= *Schoenoplectus americanus* (Pers.) Volk. ex Schinz & R. Keller] is also known from widely disjunct populations in R2. That species is mapped by Smith (in prep.) from nw-most and central WY, sw KS, and sw CO (status: G5?; KS SH; WY S2). KANU houses a single voucher of that species from Meade Co, KS. If it has not already, *Schoenoplectus americanus* should probably be the subject of an FS R2 sensitive species evaluation.

| Criteria | Rank | Rationale | Literature Citations |
|------------------------------|------|--|--|
| 1 Distribution within R2 | C | <p><i>S. pungens</i> var. <i>longispicatus</i>: Broadly distributed throughout R2, although less common in e SD, e NE and e KS (?). Status: G5T5?; CO S3; KS S5 (fide Freeman in prep. b); WY S5. [The WY Natural Diversity Database Plant Species of Concern list provides an S2 ranking for <i>Scirpus americanus</i>, recorded as restricted to Park and Teton Cos. This ranking must apply to <i>Schoenoplectus americanus</i>, not <i>S. pungens</i> (see evaluator's note above). Hartman maps <i>S. pungens</i> from throughout much of WY. For its part, KANU houses vouchers for <i>S. pungens</i> var. <i>longispicatus</i> from Campbell, Converse, Crook, Goshen, Johnson, Niobrara, Park, Platte, and Sheridan Cos, WY.] Confidence in Rank High or Medium or Low</p> | <ul style="list-style-type: none"> • Anderson 1950 • Clark 1996 • Clark & Crawford 2000 • Freeman in prep. a • Freeman in prep. b • Great Plains Flora Association 1977 • Hartman 1997 • Hazlett 1998 • Kolstad 1991 • Rolfsmeier 1993 • Shaw et al. 1989 • Smith in prep. • Weber 1995 • Weber & Wittman 2001a • Weber & Wittman 2001b |
| | A | <p><i>S. pungens</i> var. <i>pungens</i>: e ½ of SD, e ½ of NE (fide Smith), and e 1/3 of KS (e of Flint Hills). [Vouchers at KANU from Brookings Co, SD; and Cherokee, Linn, and Montgomery Cos, KS.] Status: G5T5?; KS S1 (fide Freeman in prep. b) Confidence in Rank High or Medium or Low</p> | |
| 2 Distribution outside R2 | C | <p><i>S. pungens</i> var. <i>longispicatus</i>: Broadly distributed throughout the w ¾ of the US and s Canada; s into n Mexico; disjunct in temperate South America (fide Smith). Confidence in Rank High or Medium or Low</p> | <ul style="list-style-type: none"> • Smith in prep. |
| | C | <p><i>S. pungens</i> var. <i>pungens</i>: Broadly distributed throughout the e ½ of the US and se-most Canada; disjunct in Europe (fide Smith). Confidence in Rank High or Medium or Low</p> | |

ATTACHMENT SS2

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|--------------------------------|------------|--|---|
| 3 Dispersal Capability | B | <p>NOTE: Except where specifically stated, evaluator treats both varieties together in sections 3–8. As will be apparent, most of the comments pertain to <i>S. pungens</i> var. <i>longispicatus</i>, as very little is known about <i>S. pungens</i> var. <i>pungens</i> in R2.</p> <p>Evaluator was unable to find any direct information about dispersal capability. Dispersal is probably mediated largely by animal vectors, especially water fowl. Species occupies a very wide range and a rather large variety of wetland habitats, however [rank B towards C].</p> <p>Confidence in Rank High or Medium or Low</p> | |
| 4 Abundance in R2 | C | <p>Species does not appear to set particularly abundant seed. However, it is frequently the dominant or codominant species where it occurs due to aggressive vegetative growth. Evaluator has observed <i>S. pungens</i> var. <i>longispicatus</i>: to cover many acres in wetlands in w KS and e CO.</p> <p>Confidence in Rank High or Medium or Low</p> | |
| 5 Population Trend in R2 | B D | <p><i>S. pungens</i> var. <i>longispicatus</i>: Populations appear to be secure throughout R2 [see sects 4, 6, 7 and 8].</p> <p>Confidence in Rank High or Medium or Low</p> <p><i>S. pungens</i> var. <i>pungens</i>: Evaluator was unable to find any information on distribution or population trends in R2 for taxon. Further study is warranted.</p> <p>Confidence in Rank High or Medium or Low</p> | |
| 6 Habitat Trend in R2 | B | <p>Species occupies a wide variety of wetland habitats, including shorelines of ponds and stream courses, (seasonally wet) marshes, spring runs and seeps. <i>S. pungens</i> var. <i>longispicatus</i> is known from both freshwater and salt marshes; in KS, <i>S. pungens</i> var. <i>pungens</i> is known only from freshwater habitats, in ditches and ponds. Undoubtedly, species has suffered some habitat loss from draining for agricultural purposes but species is abundant, at least in w KS and CO (evaluator, pers. obs.).</p> <p>Confidence in Rank High or Medium or Low</p> | <ul style="list-style-type: none"> • Freeman in prep. b • Rolfsmeier 1993 |

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|--|------|--|----------------------|
| 7 Habitat Vulnerability or Modification | C | Species occupies a wide variety of habitats and is frequently encountered in disturbed wetlands. Confidence in Rank High or Medium or Low | |
| 8 Life History and Demographics | C | Stoutly rhizomatous perennial graminoid. Flowering and fruiting late May through September. Species does not appear to be palatable to cattle, often thriving in wet or wet-mesic pasturelands. Evaluator was unable to find other information about species' life history. Confidence in Rank High or Medium or Low | |
| Evaluator: Caleb A. Morse, R.L. McGregor Herbarium (KANU), University of Kansas Campus West, 2045 Constant Ave, Lawrence KS 66047 | | | Date: 12/29/01 |

National Forests in the Rocky Mountain Region where species is KNOWN (K) or LIKELY (L)¹ to occur:

NOTE: "L" = *S. pungens* var. *longispicatus* [to be sought throughout R2]; "P" = *S. pungens* var. *pungens* [restricted to the e ¼ of R2 and likely found on no FS lands]

¹ Likely is defined as more likely to occur than not occur on the National Forest or Grassland. This generally can be thought of as having a 50% chance or greater of appearing on NFS lands.

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| Colorado NF/NG | | Kansas NF/NG | | Nebraska NF/NG | | South Dakota NF/NG | | Wyoming NF/NG | |
|--------------------------------------|--------|--------------|--------|-----------------------|--------|--------------------|--------|------------------|--------|
| Known | Likely | Known | Likely | Known | Likely | Known | Likely | Known | Likely |
| Arapaho-Roosevelt NF | L | Cimarron NG | L3 | Samuel R. McKelvie NF | L, P? | Black Hills NF | L4 | Shoshone NF | L |
| White River NF | L? | | | Halsey NF | L, P? | Buffalo Gap NG | L? 5 | Bighorn NF | L |
| Routt NF | L? | | | Nebraska NF | L | Ft. Pierre NG | L, P? | Black Hills NF | L6 |
| Grand Mesa, Uncompahgre, Gunnison NF | L? | | | Ogallala NG | L | | | Medicine Bow NF | L |
| San Juan NF | L? | | | | | | | Thunder Basin NG | L7 |
| Rio Grande NF | L? | | | | | | | | |
| Pawnee NG | L2 | | | | | | | | |
| Pike-San Isabel NF | L? | | | | | | | | |
| Comanche NG | L | | | | | | | | |

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- 2 Voucher specimen cited in Hazlett (1998). Also KANU catalog # 290581: CO, Weld Co: 3.5 mi N Raymer, 27 Jun 1972, S. Stephens 55977.
- 3 KANU catalog # 92229: KS, Morton Co: 7 mi N Elkhart on Cimarron River, 28 Aug 1966, S. Stephens 8860; KANU catalog # 92239: KS, Morton Co: 9 mi N Elkhart along banks of Cimarron River, 7 Jun 1961, E.L. Richards 2517A; KANU catalog # 92286: KS, Morton Co: 6 mi N Elkhart along Cimarron River, 12 Aug 1965, W.T. Barker 1916; KANU catalog # 92301: KS, Morton Co: Cimarron NG, 1.5 mi E CO border, T34S R43W S20 N½, Elev 3490 ft, 30 Jul 1987, C.C. Freeman 2444 & R.E. Brooks; KANU catalog # 10292: KS, Morton Co: ca 7 mi N, 1.5 mi W Elkhart, Cimarron NG, Middle Spring, T34S R42W S6 SW¼, Elev 3430-3440 ft, 31 May 1989, C.C. Freeman 2965; KANU catalog # 31293: KS, Morton Co: ca 7 mi N, 1.5 mi W Elkhart, Cimarron NG, Middle Spring, T34S R42W S6 SW¼ SW¼, Elev 3440-3450 ft, 16 Jul 1997, C.C. Freeman 9462.
- 4 KANU catalog # 290519: SD, Fall River Co: 7 mi SW Hot Springs, 26 Jun 1966, S. Stephens 5841.
- 5 KANU catalog # 290519: SD, Fall River Co: 15.5 mi S Hot Springs, 25 Jun 1966, S. Stephens 5765.
- 6 KANU catalog # 290432: WY, Crook Co: 4 mi E Sundance, 23 Jul 1966, S. Stephens 7687; KANU catalog # 290549: WY, Crook Co: ca 5.7 airmi WNW Inyan Kara Mtn, Black Hills, Elev 4600 ft, 30 Jul 1984, H. Marriott 8248.
- 7 KANU catalog # 290389: WY, Converse Co: 7 mi N Bill on bank of Cheyenne River, 1 Jul 1968, S. Stephens 23950 & R. Brooks; KANU catalog # 290561: WY, Converse Co: 7.5 mi N Bill, 25 Jun 1974, S. Stephens 78884.

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