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REMARKS ON *EQUISETUM ARVENSE* (EQUISETACEAE) IN TEXAS

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ABSTRACT

Equisetum arvense, previously recorded in Texas from one collection in Lubbock County in 1932, is documented here from a recent collection in the headwaters of Murtaugh Creek in Wheeler County.

KEY WORDS: *Equisetum arvense*, Equisetaceae, Texas, Great Plains

Documentation of the presence of *Equisetum arvense* L. in Texas is based upon *E.L. Reed 3616*, collected August 1932 from Buffalo Spring in Lubbock County (Correll 1956). In *Ferns and Fern Allies of Texas*, Correll (1956) did not include herbaria as part of the exsiccatae citations but only listed (on p. 16) herbaria consulted. *Reed 3616* is presumed to have been deposited at TTC (Reed Herbarium of Texas Tech University, Lubbock). This is supported by Greuter's (1990) inclusion of all of Reed's collections catalogued to TTC in *Index Herbariorum*. Several inquiries by the authors to TTC about the specimen remain without reply.

It is not clear if Correll actually saw the specimen of *Equisetum arvense* or if the information was obtained from another source, possibly casting doubt as to the true identity of the specimen. That some uncertainty existed may be indicated in Correll's (1956) statement "… I made a brief stop at Buffalo Lakes (Springs) in the hope of relocating this species. … no *E. arvense* was found." Alternatively, his effort may have been only an attempt to recollect the species and document its continued presence in the state because of the impending inundation of the original collection locality after creation of the Buffalo Springs Lake (reservoir) in early 1958 (Brune 1981). The result, regardless of circumstances, is that the record of *E. arvense* in Texas now rests on the "force of authority" (i.e., Donovan Correll) or literature rather than on a specimen.

Our studies on the flora of the Britt Ranch in Wheeler County have resulted in the serendipitous collection of the following specimen of *Equisetum arvense*, which unequivocably documents the occurrence of the species in the state.

Voucher specimen: **TEXAS**. Wheeler Co.: Britt Ranch, 2.3 miles N of jct of Tex Hwy 152 and FM 592, from entrance of ranch, ca. 5.1 mi. NNE to NW headwaters of Murtaugh Creek, 27 Jul 2010, *W.C. Holmes, J.R. Singhurst and J.N. Mink 15094A* (BAYLU). (Fig. 1).

A description of the occurrence area is in Mink et al. (2011).

The account of how the specimen was discovered is unusual and warrants retelling here. While the authors were inventorying the flora of the Britt Ranch in July 2010, several plants of the *Epilobium leptophyllum* Raf. (Onagraceae) were found and collected, this being a new record for the state (Mink et al. 2011). To expedite collecting, the authors place collections in a Calder field press (available from Herbarium Supply Co.), and later remove unwanted materials from the specimens. While removing the debris (soil and small plants) from the roots in prepping the *Epilobium* specimen for mounting, a small and, at the time, unrecognized species of *Equisetum* was removed from the debris. This *Equisetum* was transferred to an envelope and later mounted as an individual specimen, with an assigned number of *15094A* (the *Epilobium* specimen being *15094*). The *Equisetum* specimen was determined to be *E. arvense* based upon the relatively few number of primary ridges on the stem (~6) and nature of the leaf sheaths (Fig.1).

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LITERATURE CITED

Brune, G. 1981. Springs of Texas, Vol. 1. Branch-Smith, Fort Worth, Texas.

Correll, D.S. 1956. Ferns and Fern Allies of Texas. Texas Research Foundation, Renner, Texas.

Greuter, W. (ed.). 1990. Index Herbariorum. Part I. The herbaria of the world (ed. 8). New York Botanical Garden, New York.

Mink, J.N., J.R. Singhurst, and W.C. Holmes. 2011. *Epilobium leptophyllum* (Onagraceae) in the Texas flora. Phytoneuron 2011-17: 1–3.

Fig. 1. *Equisetum arvense* L. (*Holmes, Singhurst & Mink 15094A*, BAYLU). Inset magnification 4× included scale.