

BRIEF NOTE

Eleocharis parvula (R. & S.) Link., a New Species Record for the Flora of Ohio¹

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ABSTRACT. *Eleocharis parvula* (R. & S.) Link. (Cyperaceae) is reported from a saline site in Wayne County, OH. It was growing on the border of a saline pond on the property of the Morton Salt Company, Rittman, OH.

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INTRODUCTION

Eleocharis parvula (R. & S.) Link. (Cyperaceae), a small spike rush (2-10 cm tall) found growing on brackish or saline shores, has not been previously reported as part of the flora of Ohio (Braun 1967, Weishaupt 1971). We collected fruiting specimens of this species on 17 June 1992 on the edge of a shallow saline pond located in Wayne County, OH.

MATERIALS AND METHODS

The location of the study site is on the property of the Morton Salt Company at Rittman, Wayne County (long. 81° 47' 30", lat. 40° 57' 30"; SW 1/4 Sec. 12, T 18 N, R 13 W). A list of species growing on the border of a saline pond was compiled. Soil characteristics, including pH, specific conductance, and total dissolved salt concentration were determined using the techniques described in Loveland and Ungar (1983).

RESULTS AND DISCUSSION

A dense population of *E. parvula*, with over 100 fruiting plants in an area of less than 1 m in diameter, was found growing on the edge of a shallow saline pond at the Rittman Salt Marsh on 17 June 1992. Soil samples taken from the root zone of these plants indicated that the soils had a pH of 6.3, a specific conductance of 9.2 mS/cm, and a total dissolved salt content of 5,998 ppm. *Eleocharis parvula* was only observed at this one location on the salt marsh. It was not previously reported for the flora of the area prior to 1992 by Cusick (1970) or Riehl and Ungar (1980), indicating that it may have recently dispersed into this salt marsh area.

Fernald (1950) indicates that *E. parvula* occurs along brackish and saline coastal shores from Newfoundland to Louisiana. Locally, he reports that it also has been found in inland locations in New York, Michigan, and Minnesota. Gleason and Cronquist (1991) also indicate that *E. parvula* occurs in saline and alkaline inland locations east of the Mississippi River. Svenson (1927) describes the

pattern of occurrence of halophytes in central and western New York state and in the Great Lakes region. He suggests that human activities (railways and canals) and bird migrations could be the mechanisms of distribution of these halophytes into inland locations. Salting of highways in the midwest, brine spills, and salt mining provide suitable saline habitats for halophytes (Ungar 1991). The presence of saline soil conditions at the Rittman Salt Marsh is the result of salt mining operations at this location. Dispersal of salt tolerant plant species into this disjunct salt marsh location in Ohio is probably from visits by migrating birds (Ungar and Loveland 1982). A number of halophytic species were associated with *E. parvula* at the Rittman Salt Marsh site, including *Hordeum jubatum* L., *Spergularia marina* L., *Atriplex prostrata* Boucher ex DC., and *Salicornia europaea* L.

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