ADDITIONS AND COMMENTS ON THE VASCULAR FLORA OF CADDO PARISH, LOUISIANA

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ABSTRACT

The vascular flora of Caddo Parish, Louisiana, is updated. Field research has yielded two new species, one previously reported but now ubiquitous species, and one problematic species.

Since the publication of our "An updated, annotated vascular flora of Caddo Parish, Louisiana, with notes on regional phytogeography and ecology" (MacRoberts & MacRoberts 2006) and several updates recording new species to the parish (MacRoberts et al. 2012, and references), we have continued to locate interesting additions. Two new additions are reported and one problematic and one interesting species are discussed. The Caddo Parish vascular plant list now stands at 1443 species, of which about 17% are non-native.

APIACEAE

*Bowlesia incana Ruiz & Pavon, MacRoberts & MacRoberts 8975, 8976, 8989 LSUS; 8977, 8988 LSU. We reported this species for Caddo Parish (MacRoberts & MacRoberts 2006) on the basis of a R. Dale Thomas specimen collected in the late 1990s and housed at NLU. Except for the Thomas specimen, Bowlesia incana had not been previously reported for northwest Louisiana, southern Arkansas, or northeast Texas (Kartesz 2014; Turner et al. 2003). Recently we found this species to be ubiquitous in frequently mowed areas in Shreveport parks, along highways, LSU-Shreveport campus, and in other locations around the city. Because Bowlesia incana is now so common in Shreveport, we decided to see if it was common elsewhere. A few short trips settled the matter; we found it abundant near the Shreveport-Barksdale Bridge in Bossier City, Bossier Parish, and it is abundant in frequently mowed roadside parks in Shelby and Harrison counties, Texas (MacRoberts & MacRoberts 8990, 8991, LSU, LSUS, TEX).

COMMELINACEAE

*Murdannia nudiflora (L.) Brenan, MacRoberts & MacRoberts 8959 US; 8960 LSU. While the Louisiana Commelinaceae was of special interest to D.T. MacRoberts (1980), he never found Murdannia nudiflora, and it has not otherwise been reported from northwest Louisiana or northeast Texas, with only one county record for southeast Arkansas (Kartesz 2014). We found it to be common along a 300 meter intermittent stream in Columbia Park, Shreveport. It was first located in 2014 and has persisted at least until 2016.

HYDROPHYLLACEAE

Nemophila aphylla (L.) Brummitt, *MacRoberts & MacRoberts* 8981 LSU. This species has been reported widely distributed across Louisiana, southeast Texas, and Arkansas but not for Caddo Parish (Kartesz 2014). We discovered two plants in Columbia Park, Shreveport. While additional searches were made, no other sites were found.

SALVINIACEAE

Salvinia sp., MacRoberts and MacRoberts 8972, 8973 LSU, LSUS. (Figure 1). The taxonomy of Salvinia appears to be controversial. There is much confusion and discourse surrounding S. minima

Baker and *S. molesta* D.S. Mitch. We have been observing *Salvinia* in Bickham-Dickson Park, Shreveport (MacRoberts et al. 2008) since the heavy and extended floods of 2016 (it was not present there in 2008). All keys that we have consulted lead to confusion, because all of the specimens we have found (and raised in tubs) show characteristics of both *S. minima* and *S. molesta* as described in available keys. Thus while all of our collections have "egg beater" hairs on the upper surface of the leaf, the floating leaves are small (6-15mm long), not folded, and their lower surface is more or less densely covered with long hairs (see key in Diggs and Lipscomb 2014). Conversations with local "experts" and a summary of the literature have not led to an unambiguous determination; there is talk of sterile plants, hybrids, age grades, and so on. In any case, whatever this small-leaf *Salvinia* is, it is common in Bickham-Dickson Park. *Salvinia molesta* has previously been reported from Caddo Parish (Kartesz 2014).



Figure 1. Salvinia at Lake Martin (Lake la Pointe), St. Martin Parish, Louisiana (photo by Bill Wood).

ACKNOWLEDGMENTS

Robert Faden confirmed our identification of *Murdannia nudiflora*; Matyas Buzgo confirmed our identification of *Bowlesia incana*. Bill Wood generously allowed us to use his photograph of *Salvinia*. Dennis Bell aided with information on the *Bowlesia incana* specimen at NLU.

LITERATURE CITED

Diggs, G.M. and B.L. Lipscomb. 2014. The Ferns and Lycophytes of Texas. Bot. Res. Institute of Texas Press, Fort Worth.

- Kartesz, J.T. 2014. The Biota of North America Program (BONAP). Chapel Hill, North Carolina.
- MacRoberts, B.R. and M.H. MacRoberts. 2006. An updated, annotated, vascular flora of Caddo Parish, Louisiana, with notes on regional phytogeography and ecology. Sida 22: 1191–1219.
- MacRoberts, B.R., M.H. MacRoberts, C.S. Reid, and R. Ohlsson-Salmon. 2012. Further additions and emendations to the vascular flora of Caddo Parish, Louisiana. J. Bot. Res. Institute of Texas 6: 279–281.
- MacRoberts, D.T. 1980. Notes on *Tradescantia* (Commelinaceae) V. *Tradescantia* of Louisiana. Bull. Mus. Life Sciences 4: 1–15.
- MacRoberts, M.H., B.R. MacRoberts, and G.M. Hanson. 2008. Vascular flora of C. Bickham-Dickson/Red River Education and Research Park, Caddo Parish, Louisiana: An oxbow lake community with comments on exotic/native species ratios. J. Bot. Res. Institute of Texas 2: 1389–1406.
- Turner, B.L., H. Nichols, G. Denny, and O. Doron. 2003. Atlas of the Vascular Plants of Texas. Sida, Bot. Miscell. 24: 1–888.