

## OCCURRENCE OF *NAJAS MINOR* AND *NAJAS MARINA* (NAJADACEAE) IN OKLAHOMA

Edward N. Nelson and Richard W. Couch

Department of Natural Sciences, Oral Roberts University, Tulsa, Oklahoma 74171

During the course of a field and herbarium survey of Oklahoma's floating-leaved and submerged vascular aquatic flora, two species of *Najas*, previously unreported for the state, were encountered. *Najas marina* L. (Holly-leaf Naiad) was found in Harmon County (R26W-T4N-10) 29 Jun 1979 in Lake Hall, 10 mi north of Hollis. The plants formed a broad band encircling the lake about 5 m from shore in water less than 3 m deep. *Najas minor* All. (Spiny-leaf Naiad) was found in Murray County (R3E-T1S-30) in the Lake of the Arbuckles at The Point Area on 8 Aug 1979. A second visit to the Lake of the Arbuckles 9 Sep 1980 revealed a large population at the Buckhorn Area boat ramp (R3E-T1S-32).

Voucher specimens of these two species are deposited in the Oral Roberts University Herbarium, the Oklahoma State University Herbarium (OKLA), the Bebb Herbarium at the University of Oklahoma (OKL), and the Southeastern Oklahoma State University Herbarium (DUR).

*Najas marina* L. Harmon Co. Lake Hall, 10 mi N. Hollis 29 Jun 1979, E. Nelson & R. Couch 103.

*Najas minor* All. Murray Co. Lake of the Arbuckles, 8 Aug 1979, E. Nelson & R. Couch 160. 9 Sep 1980, E. Nelson & R. Couch 362.

Correll and Correll (1) list neither of these species for Oklahoma. *Najas marina* is listed for the southwest United States, while *N. minor* is not. Haynes (2), in a recent revision of the North and Central American *Najadaceae*, does not cite specimens from Oklahoma. Taylor (3) does not list these two species in his catalog of Oklahoma aquatics. Waterfall (4) acknowledges but a single species of the genus for Oklahoma. Haynes surmises that *N. minor* is a native of Eurasia that invaded North America nearly 50 years ago. With gradual eutrophication of the freshwaters of the eastern United States, the species has become increasingly widespread, in fact, has become the dominant *Najas* in some areas. *N. marina*, on the other hand, prefers the brackish or highly alkaline waters found throughout North and Central America (1, 2, 3, 4).

### REFERENCES

1. D. S. CORRELL and H. B. CORRELL, *Aquatic and Wetland Plants of Southwestern United States, Vol. I*, Stanford University Press, 1975.
2. R. R. HAYNES, *Sida* 8 (1): 34-56 (1979).
3. R. J. TAYLOR, *A Catalog of Vascular Aquatic and Wetland Plants That Grow in Oklahoma*, Herbarium, Southeastern Oklahoma State University, Durant, 1977.
4. U. T. WATERFALL *Keys to the Flora of Oklahoma*, Department of Botany and Research Foundation, Oklahoma State University, Stillwater, 1969.