

***Donrichardsia macroneuron*** (Grout) Crum & Anderson

Status: **Critically Endangered (CR)** B1,2c

---

Class: Bryopsida

Order: Hypnobryales

Family: Donrichardsiaceae

**Description and biology:** *Donrichardsia macroneuron* is a large, coarse moss that grows in dense to loosely interwoven mats that can reach 14 cm in length. Shaded mats are blue-green to blackish-brown, but those exposed full sun are yellow-green. The leaves are characterized by an extremely strong midrib that occupies about one-third the width of the leaf base. The leaves are typically one cell thick except in conspicuous longitudinal streaks. Sporophytes of this moss have never been observed.

**Distribution and habitat:** This aquatic moss is known only from the type locality: USA: Texas: Edwards County: Seven Hundred Springs Ranch, limestone cliffs on the South Llano River, off US 377, 32 km SW of Junction, 570 m elevation. Plants are abundant along a 100-m area of a limestone bluff, where they grow partially submerged in shaded areas in rapidly flowing water within a 1.0-m zone between the springs and the river below. Intensive searching of similar sites within the area failed to produce even one new locality. Collected only three times (1932, 19 and 1979), all from the type locality.

**History and Outlook:** *Donrichardsia macroneuron* is restricted to extremely rare relictual habitats of rapidly flowing springs over limestone. It may have once been more widespread on the Edwards Plateau of Texas, but it has gradually retreated to increasingly rare sites where springs have never dried up, despite increasing aridity in this region over the past 10,000 years. A prolonged drought or alteration of the site on the South Llano River (e.g., a rise in the level of the river due to dam construction) could sound the death knell for this species.

**References:**

- Crum, H. and L. E. Anderson. 1979. *Donrichardsia*, a new genus of Amblystegiaceae (Musci). *Fieldiana Bot. N. S.* 1: 1-8.
- Crum, H. and L. E. Anderson. 1981. *Mosses of eastern North America*. Columbia Univ. Press, New York.
- Grout, A. J. 1933. *Hygroamblystegium macroneuron* n. sp. *Bryologist* 36: 1-2.
- Wyatt, R. and A. Stoneburner. 1980. Distribution and phenetic affinities of *Donrichardsia*, an endemic moss from the Edwards Plateau of Texas. *Bryologist* 83: 512-520.

**Red Data sheet author**

Dr. Robert Wyatt, Institute of Ecology, University of Georgia, Athens, Georgia 30602, U.S.A.

---

**Last updated:** April 2000