

Elisabeth Anne Wheeler

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**Degrees:**

B. A. 1965, Biology, Reed College, Portland, Oregon. [yes, I took the same calligraphy course that Steve Jobs took, but not at the same time, and I only developed neat handwriting, not a computer with multiple fonts available]

M. A. 1970, Botany, Southern Illinois University, Carbondale, Ill.

Ph.D. 1972, Botany, Southern Illinois University, Carbondale, Ill.

**Professional Experience:**

2001 – Present. Department of Forest Biomaterials, North Carolina State University; Professor Emerita. Research Associate, N.C. Museum of Natural Sciences, Raleigh, N.C.

1976 - 2001 Department of Wood and Paper Science, North Carolina State University; Professor

1972 - 1976 Curatorial Assistant and Honorary Research Fellow, Bailey-Wetmore Laboratory of Plant Anatomy and Morphology, Harvard University.

1972 - 1974 Instructor, Pine Manor Junior College, Brookline, Massachusetts. Taught Introductory Botany, Cell Biology.

1972 - 1973 Lab Instructor, Harvard University Extension. General Botany.

**Research Interests:**

Tree history – Cretaceous-Tertiary; wood anatomy: Current projects: continued editing of InsideWood – <http://insidewood.lib.ncsu.edu>, systematic and ecological anatomy of Eocene woods of the western U.S. (with Steve Manchester), late Cretaceous woods of GA and NC (with H. Falcon-Lang & P. Baas), of Big Bend National Park, TX (with T. M. Lehman), and of the McRae and Crevasse Canyon Formations, TX (with Emilio Estrada-Ruiz and Gary Upchurch)

**Selected Academic and Professional Awards:**

Alumni Distinguished Undergraduate Professor, N.C. State University; Fellow, International Academy of Wood Science, North Carolina State University Libraries Faculty Award; College of Forest Resources Teaching Excellence Award; Honorary Membership, International Association of Wood Anatomists; Cichan Award, Paleobotanical Section, BSA

**Memberships:**

International Association of Wood Anatomists, Botanical Society of America; International Organization of Paleobotany (IOP).

**Selected Publications**

Gasson, P., P. Baas, & E.A. Wheeler. 2011. Wood anatomy of CITES-listed tree species. *IAWA Journal* 32 (2): 155-198.

Wheeler, E.A. 2011. InsideWood – A web resource for hardwood anatomy. *IAWA Journal* 32 (2): 199-211.

Baas, P. & E. Wheeler. 2011. Wood anatomy and climate change. Chp 6 *in*: Climate Change, Ecology and Systematics. T. Hodkinson, M. Jones, S. Waldren, & J. Parnell, eds. Systematic Association Special Volume Series. [ISBN: 9780521766098]

Manchester, S.R., T.M. Lehman, & E.A. Wheeler. 2010. Fossil palms (Arecaceae,

- Coryphoideae) associated with juvenile herbivorous dinosaurs in the Upper Cretaceous Aguja Formation, Big Bend National Park, Texas. *International Journal of Plant Science* 171: 679-689.
- Wheeler, E.A. & T.A. Dillhoff. 2009. The middle Miocene fossil wood flora from Vantage, Washington. *IAWA Journal Supplement* 7. 101 pp.
- Gregory, M., I. Poole, & E.A. Wheeler. 2009. Fossil dicot wood names: an annotated list with full bibliography. *IAWA Journal Supplement* 6. 220 pp.
- Wheeler, E.A. & T.M. Lehman. 2009. New late Cretaceous and Paleocene dicot woods of Big Bend National Park, Texas, and review of Cretaceous wood characteristics. *IAWA Journal* 30: 293-318,
- Wheeler, E.A., P. Baas, & S. Rodgers. 2007. Variations in dicot wood anatomy. A global analysis. *IAWA Journal* 28: 229-258.
- Wheeler, E.A. & T.M. Lehman. 2005. Cretaceous – Paleocene conifer woods from Big Bend National Park, Texas. *Palaeogeography, Palaeoclimatology, Palaeoecology* 226: 233-258.
- Baas, P., F.W. Ewers, S.D. Davis, & E.A. Wheeler. 2004. The evolution of xylem physiology. Pp. 273-296 in: Hemsley, A.R. & I. Poole (eds.). *Evolution of plant physiology. From whole plants to ecosystems*. Linnean Society Symposium Series No. 21. Elsevier Academic Press.]
- Baas P., S. Jansen & E.A. Wheeler. 2003. Ecological adaptations and deep phylogenetic splits – evidence from the secondary xylem. In *Deep Morphology. Toward a Renaissance of Morphology in Plant Systematics*. Stuessy, T.F., Mayer, V. & Hörandl, E. (eds.). *Regnum Vegetabile* 141, 221—239.
- Wheeler, E.A. & S.R. Manchester. 2002. Woods of the Middle Eocene Nut Beds Flora, Clarno Formation, Oregon, USA. *IAWA J. Supplement* 3, 188 pp.
- Lehman, T.M. & E.A. Wheeler. 2001. Fossil dicotyledonous forest from the Upper Cretaceous of Big Bend National Park, Texas. *Palaaios* 16: 102-108.
- Wheeler, E.A. & T.M. Lehman. 2000. Late Cretaceous woody dicots from the Aguja and Javelina Formations, Big Bend National Park, Texas, USA. *IAWA Journal* 21: 83-120.
- Wheeler, E.A. & P. Baas. 1998. Wood identification. A review. *IAWA J.* 19: 241-264.
- Wiemann, M.C., E.A. Wheeler, S.R. Manchester, & K.M. Portier. 1998. Dicotyledonous wood anatomical characters as predictors of climate. *Palaeogeography, Palaeoclimatology, Palaeoecology* 139: 83-100.
- Wheeler, E.A. & P. Baas. 1991. A survey of the fossil record for dicotyledonous wood and Its significance for evolutionary and ecological wood anatomy. *IAWA Bull. n.s.* 12: 272-332.
- Wheeler, E.A. 1991. Paleocene dicotyledonous trees from Big Bend National Park, Texas. Variability in wood types common in the Late Cretaceous and Early Tertiary, and ecological inferences. *Amer. J. Bot.* 78: 658-671.

### Recent

Instructor at PROTA workshops (PROTA = Plant Resources of Tropical Africa), in Montpellier, France, and Kumasi, Ghana (Sept. 2010). Member of a team of 5 instructors, 12 African participants, objective to teach wood anatomy to participants and produce wood anatomical descriptions of 200 and 136 Tropical African tree species. Descriptions available at Protabase. Plant Resources of Tropical Africa /

Resources végétales de l'Afrique tropicale, Wageningen, Netherlands

<http://database.prota.org/search.htm> and <http://insidewood.lib.ncsu.edu/search>.