

## SHORTER NOTE

***Osmunda cinnamomea* forma *frondosa* in the Coastal Plain of Georgia and Florida.**—The article of Werth et al. (Amer. Fern J. 75:128–132, 1985) reporting the discovery and observations of *Osmunda cinnamomea* L. forma *frondosa* (Torrey & Gray) Britton at Mountain Lake, Virginia, has provoked interest in this puzzling morphology. Typically, *O. cinnamomea* sporophylls are strictly dimorphic with respect to spore production; however, forma *frondosa* produces sporophylls that bear both sterile and fertile pinnae. This unusual form of Cinnamon Fern has not been reported previously from Georgia (McVaugh & Pyron, *Ferns of Georgia*, The University of Georgia Press, 1951) or Florida (Lakela & Long, *Ferns of Florida*, Banyan Books, Miami, 1976). However, there are at VSC three records of *Osmunda cinnamomea* forma *frondosa* from the Coastal Plain of Georgia and Florida:

GEORGIA: **Brantley Co.:** ¼ mi E of ITT-Rayonier Satilla Forest Headquarters along Hwy GA-32 between Browntown and Needmore, 9 Sept 1982, *Faircloth 8711*. **Lowndes Co.:** Slough S of Valdosta, along Loch Laurel Road, 4.3 mi S of Hwy GA-31, 24 Apr 1986, *Carter 4807*. FLORIDA: **Leon Co.:** Disturbed sandy ground just E of St. Marks River and 2 mi W of Jefferson County line on Hwy US-27, 1 Nov 1979, *Carter 2318*.

The Brantley County population consisted of seven plants that were located on the backslope of highway GA-32 and numerous plants that extended into the adjacent pine flatwoods. Only those plants located on the backslope had *frondosa*-type sporophylls. Development of laminar and sporogenous pinnae on a frond was highly variable among the seven plants and even among fronds on individual plants. There was evidence that the plants on the backslope had been mown over earlier in the year by Rayonier personnel. At the Lowndes County site only a single plant of forma *frondosa* was found in a population of about one hundred typical plants. This plant was located near the edge of woods and was conspicuously smaller than its typical neighbors. Data on population size and other pertinent notes relating to site disturbance is lacking for the Leon County record. Our observations also suggest that this phenomenon is environmentally induced but we have no additional explanations to offer beyond those reviewed and proposed by Werth et al. (1985). The phenomenon probably has little genetic or taxonomic significance; however, we feel it is worthy of continued study to elucidate a clearer explanation of the factors underlying morphological expression of leaf dimorphism. We do suspect that forma *frondosa* is of more frequent and widespread occurrence than has been reported previously.—RICHARD CARTER and WAYNE R. FAIRCLOTH, Department of Biology, Valdosta State College, Valdosta, GA 31698.