

ROYAL FERN

Osmunda spectabilis Willd.

Synonyms: *Osmunda regalis* L. var. *spectabilis* (Willd.) Gray

Family: Osmundaceae (royal fern)

FNAI Ranks: G5/S5

Legal Status: US-none; FL-Commercially Exploited



Leaves broadly triangular in shape. Floodplain swamp at Caravelle Ranch Wildlife Management Area. Photo by Kelly Anderson.

Field Description: Herbaceous perennial fern with bipinnate leaves, each pinna fully divided into distinct pinnules, the larger pinnules 3 - 7 cm long and 0.7 - 2.0 cm wide; spores borne on modified pinnae in the terminal portion of the leaf blade; veins of each pinnule 2 times Y-forked (thus each vein reaching the margin as 4 final veinlets), each final veinlet making a fine tooth, thus the pinnule margins finely serrulate

Similar Species: Royal fern is easily recognized, even in comparison to similar species in Florida such as cinnamon fern (*Osmundastrum cinnamomeum*), which has only once pinnate leaves with a tuft of cinnamon-colored hairs at the base of the leaf segments and differentiated fertile and sterile fronds.

Related Rare Species: Cinnamon fern (*Osmundastrum cinnamomeum*) is also considered commercially exploited by the state of Florida.

Habitat: Swamps, bogs, and marshes; mesic and hydric hammocks.

Best Survey Season: Identifiable all year.

Range-wide Distribution: NL (Newfoundland) west to MB, south to south FL, eastern TX; Mexico south through Central America to southern South America; West Indies.

Conservation Status: Secure in Florida and plants are common in acidic wetlands. The fibrous base of this fern is a useful growing medium for cultivated epiphytic orchids, and thus they are vulnerable to collection. Currently, the species is secure.

Protection and Management: Avoid disturbance, particularly timbering, in forested wetlands. Protect populations from collection.

References: Coile 2000, Weakley, A. S. and the Southeastern Flora Team 2024, Wunderlin and Hansen 2011.



Fertile fronds are linear in shape with red-brown color. Floodplain swamp at Caravelle Ranch Wildlife Management Area. Photo by Kelly Anderson.



Leaves 2 - pinnate with 5 - 7 pairs of pinnae. Dome swamp at Lafayette Forest Wildlife and Environmental Area. Photo by Kelly Anderson.



Ecotone of basin swamp and restoration mesic flatwoods at Aucilla Wildlife Management Area. Photo by Kelly Anderson.