

Kasey Hartz Natural Area Reference Sheet



Muskegon Community College

Osmunda regalis var. *spectabilis*

Royal Fern

Osmundaceae (Royal fern family)

Blooming season:

No flowers, but plant adds fronds to the outside formation every spring and looks like a crown.

Plant:

Perennial plant; the active growth season is spring to fall.

Stipes are 2-50 cm long and pinkish in color.

Plant can be 1.83 m tall. Rhizomes are ascending and form a massive, circular base.

Growth is by rhizomes and root depth is a minimum of 41 cm.

The gametophyte is a tiny green heart shaped plant that lives above ground.



Leaves:

The fronds are dimorphic. 3-13 dm long and 10-15 cm wide. Ovate in shape and obtuse at the base and apex. 5-7 opposite stalked pinnae with no tuft or reddish brown hairs below the pinnae.

The sterile and fertile pinnae are found on the same frond.

The sterile pinnae are a pale green and oblong in shape. 6-28 cm long and 4-14 cm wide. 5-13 pairs of Sub-opposite pinnae.

The fertile pinnae are found above the sterile pinnae. Oblong to lanceolate in shape. 3-12 cm long and 1 cm wide. At maturity these are the brown pinnae found at the end of the frond tip.

Flower:

No flower.

Fruit:

No fruit, but has spores. Sporangia are found on fertile pinnae in brownish clusters.

The immature spores are green while the mature spores are brown. The spores mature between May and June.

Can be confused with:

Cinnamon Fern because fronds have similar shapes, come from the same family, and typically are both found in the same area.

There are other varieties of *O. regalis* but these occur in other continents: Asia, South America, Europe, and Africa (Lellinger 121).

Geographic range:

Type specimen location: Creek Bed Habitat

State: Common throughout the Upper and Lower Peninsulas.

Regional: Found commonly from Newfoundland to Saskatchewan, to Florida, Texas, Oklahoma, and to Minnesota.

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Habitat:

Local: Found in low woods, marshes, and swamps.

Regional: A terrestrial plant that grows in wet mostly acidic soil in swamps, bogs, and along stream banks. Prefers fine to coarse soil. Has a low fire and drought tolerance. Prefers a pH between 4 and 6. Precipitation minimum requirement is 81 cm to a maximum of 140 cm (USDA-Plants Database).

Common local companions:

Maples, mayapple, spicebush, and other wetland species.

Usages:

Human: Is cultivated in gardens and is also palatable to humans (USDA-Plants Database).

The Iroquois used it in a mixture to help children who suffered from convulsions due to intestinal worms and also for women with menstrual complaints (Moerman 373). The Seminole used it to treat chronically ill babies and also used a plant infusion for a steam and bath for those who were insane (Moerman 373).

Why is it called *that*?:

Osmunda comes from the name Osmund the waterman or the Anglo-Saxon god of thunder referring to the royal bearing of the entire family, and *regalis* means regal or kingly because of the regal bearing of the fern. The variation name *spectabilis* means spectacular or admirable also saying that this variation of the royal fern is especially good-looking in the way it grows (Gledhill).

Prepared by: Elizabeth LaRue April 2008