

***Dryopteris* – Far From Marginal!**

During my late winter walks throughout the woodlands of New Jersey and New England, I have often enjoyed the Marginal Wood Fern or *Dryopteris marginalis* with its ability to defy the winter cold and remain evergreen. Although these ferns typically fail to retain their upright summertime form, preferring to collapse and lie prostrate under winters' snow and cold, they still provide a wonderful touch of green. They also continue to provide the Garden with that wonderfully attractive lacy texture we so appreciate and need from ferns.

Dryopteris is a genus of over 250 species, including both evergreen and deciduous ferns, growing throughout North America and Asia. It is a member of the Dryopteridaceae family and was originally penned by the French naturalist, Michael Adanson (1727-1806). It is derived from the Greek Drys which means Oak or 'A Wood' and Pteris meaning Fern, hence the common name of Wood Fern! The species epithet of *marginalis* refers to the location of the sori (singular sorus) or spore releasing organs of a fern. The sori are located on the undersides of certain leaves known as sporophylls. On some fern genera, these leaves appear totally different than the normal leaves, while on others, such as *Dryopteris*, they appear virtually identical. The sori are located near the margin of the leaflet, providing not only the species epithet, but the complete common name as well. Carl Linnaeus originally named the fern *Polypodium marginale* in 1753, but it was the renowned American Botanist, Asa Gray (1810-1888) who made the proper reclassification in 1848.

Marginal Wood Fern is a clump forming plant, with its non-branching underground stem or rhizome mounding upward to form an erect crown. The individual leaves or fronds are bluish green above and light green beneath. The fronds are twice compound, meaning that the overall leaf splits into leaflets, and these leaflets split once again, giving the fronds a very lacy texture. They grow from 18-30"+ tall, depending upon the cultural conditions and they arch slightly outward, giving the overall plant an elegant vase-shaped outline. Marginal Wood Fern is certainly tough, enduring zone 3 winters and is easily grown in humus rich, well-drained to slightly moist soils in a shady site. It is an ideal garden fern for both massing and for use as a single specimen, appearing best when paired with bolder leafed plants, such as *Hosta*, *Tiarella* (Foam Flower) and *Calycanthus* (Sweetshrub).

Another evergreen Wood Fern is *Dryopteris erythrosora*, which is native to moist wooded hillsides of Japan, China and Taiwan. A very garden worthy plant since not only is it evergreen, but the unfurling new foliage is colored an orange-red to a copper-pink before maturing to a deep rich green. Since this plant produces new fronds from spring through mid-summer, it provides the Garden with an extended colorful display. These autumnal colors of the fronds yielded its common name of Autumn Wood Fern. The fronds are a bit shorter than its North American cousin, only reaching 18-24" in height. However, its shorter stature is compensated by its ability to remain upright in winter, providing a more effective Garden presentation. The species epithet stems from the Greek *Erythros* meaning red while *sora* refers to the sori located beneath the

sporophylls. It refers not to the orange-red leaf coloration, but actually to the sori beneath the leaf. On some ferns, a membrane flap called an indusium (plural indusia) covers and protects the sori until the spores are mature. On Autumn Wood Fern, the indusium is red and gives the ripening sori a red coloration, as seen on the right.



The rhizome of *Dryopteris erythrosora* is lightly branching and spreading, making it an ideal plant for massing in the Garden. It requires a bit more moisture or humus enriched soils than its American cousin for it to appear its best and it pairs well with the Golden Woodrush (*Luzula sylvatica* ‘Aurea’), Evergold Golden Sedge (*Carex oshimensis* ‘Everillo’) or any golden foliaged or flowered plant suitable for shade. Lastly, both of these Wood Ferns are resistant to deer browse – hopefully making gardeners realize that *Dryopteris* is anything but Marginal!