

Ferns

Lady Fern *Athyrium filix-femina*

Male Fern *Dryopteris filix-mas*

Royal Fern *Osmunda regalis*

Bracken *Pteridium aquilinum* Raithneach

Hard Fern *Blechnum spicant*

Scaly Male Fern *Dryopteris affinis*

Broad Buckler Fern *Dryopteris dilatata*

Polypody *Polypodium vulgare*



Ferns are more primitive than the flowering plants that dominate many of the world's natural habitats today. They evolved very early in the earth's history and were the dominant plant type during the Carboniferous period about 300 million years ago. Most of the world's coal has been formed from the remains of dead ferns and tree ferns that formed extensive forests at that time.

Ferns are generally more delicate than herbs and other flowering plants and are vulnerable to drying out. Because of this they tend to grow in humid, shady conditions, such as the woodland floor and are often particularly abundant near to water. Many ferns grow epiphytically *i.e.* on other plants, using their host plant like a kind of ladder, to help them to get more sunlight for photosynthesis. Some ferns are evergreen and are visible on the woodland floor throughout the year. Others are deciduous and die back each year, new fronds emerging in their beautiful crosier-like form in the spring.



The male fern, scaly male fern and broad buckler fern are common in our woodlands and hedgerows. The more delicate lady fern is less abundant and usually found in wetter parts of our woods. Bracken is a large robust species usually found in more open conditions. As it dies back each winter, it turns a reddish straw colour as it takes its nutrients for storage into its underground rhizome. It is particularly associated with old settlements and can be seen around the area of old famine settlement within the park. In the past it was used for bedding and soap making. The royal fern is a waterside species that does not appear until mid-summer, and is more abundant in the west of Ireland than the east. You can see this growing by the pools on the river walk.



Most ferns have some level of toxins in their fronds and so are poisonous to grazing animals and to humans. Nonetheless, the male fern was used as a treatment for tapeworm in the past and polypody was used to treat gall bladder complaints.